Case Creation Option

Case "09924292" already exists. Please overwrite it or cancel the operation.

The Contents of Case *"09924292"*

Qnum	Query	DB Name	Thesaurus	Operator	Plural
Q1	methylquinoxaline	USPT,PGPB	None	ADJ	YES
Q2	methylquinoxaline or 2-methylquinoxaline	USPT,PGPB	None	ADJ	YES
Q3	methylquinoxaline n5 carboxylic acid or 2-methylquinoxaline carboxylic acid	USPT,PGPB	None	ADJ	YES
Q4	methylquinoxaline carboxylic acid or 2-methylquinoxaline carboxylic acid	USPT,PGPB	None	ADJ	YES
Q5	(methylquinoxaline same carboxylic acid) or (2-methylquinoxaline same carboxylic acid)	USPT,PGPB	None	ADJ	YES
Q6	Q2 and Q5	USPT,PGPB	None	ADJ	YES
Q7	absidia or Alternaria or Aspergillus or Cunninghamela or Giumerella or Penicillium or Pseudomonas	USPT,PGPB	None	ADJ	YES
Q8	(Production or synthesis or tansformatiuon or bioconversion)	USPT,PGPB	None	ADJ	YES
Q9	Q5 and Q8	USPT,PGPB	None	ADJ	YES
Q10	Q6 and Q8	USPT,PGPB	None	ADJ	YES
Q11	Q9 and Q10	USPT,PGPB	None	ADJ	YES
Q12	Q7 and Q11	USPT,PGPB	None	ADJ	YES
Q13	Q2 and Q7	USPT,PGPB	None	ADJ	YES
Q14	Q5 and Q7	USPT,PGPB	None	ADJ	YES
Q15	Q9 and Q13	USPT,PGPB	None	ADJ	YES
Q16	((435/117)!.CCLS.)	USPT,PGPB	None	ADJ	YES
Q17	(((435/243)!.CCLS.))	USPT,PGPB	None	ADJ	YES
Q18	(((435/254.1)!.CCLS.))	USPT,PGPB	None	ADJ	YES
Q19	(((435/254.3)!.CCLS.))	USPT,PGPB	None	ADJ	YES

Q20	(((435/254.5)!.CCLS.))	USPT,PGPB	None	ADJ	YES
Q21	Q19 and Q20	USPT,PGPB	None	ADJ	YES
Q22	Q18 and Q21	USPT,PGPB	None	ADJ	YES
Q23	Q17 and Q22	USPT,PGPB	None	ADJ	YES
Q24	Q16 and Q17	USPT,PGPB	None	ADJ	YES
Q25	Q16 and Q22	USPT,PGPB	None	ADJ	YES
Q26	((methylquinoxaline/)!.IPC. |(2-methylquinoxaline/)!.IPC. |(or/)!.IPC.)	JPAB,EPAB,DWPI	None	ADJ	YES
Q27	(((methylquinoxaline/)!.IPC. |(2-methylquinoxaline/)!.IPC. |(or/)!.IPC.))	JPAB,EPAB,DWPI	None	ADJ	YES
Q28	methylquinoxaline or 2-methylquinoxaline	JPAB,EPAB,DWPI	None	ADJ	YES
Q29	(methylquinoxaline same carboxylic acid) or (2-methylquinoxaline same carboxylic acid)	JPAB,EPAB,DWPI	None	ADJ	YES
Q30	absidia or Alternaria or Aspergillus or Cunninghamela or Giumerella or Penicillium or Pseudomonas	JPAB,EPAB,DWPI	None	ADJ	YES
Q31	(Production or synthesis or tansformatiuon or bioconversion)	JPAB,EPAB,DWPI	None	ADJ	YES
Q32	Microbial or fungal or bacterial or biological	JPAB,EPAB,DWPI	None	ADJ	YES
Q33	Q31 and Q32	JPAB,EPAB,DWPI	None	ADJ	YES
Q34	Q30 and Q31	JPAB,EPAB,DWPI	None	ADJ	YES
Q35	Q30 and Q32	JPAB,EPAB,DWPI	None	ADJ	YES
Q36	Q29 and Q35	JPAB,EPAB,DWPI	None	ADJ	YES
Q37	Q29 and Q34	JPAB,EPAB,DWPI	None	ADJ	YES
Q38	Q29 and Q33	JPAB,EPAB,DWPI	None	ADJ	YES
Q39	Q29 and Q32	JPAB,EPAB,DWPI	None	ADJ	YES
Q40	Q29 and Q31	JPAB,EPAB,DWPI	None	ADJ	YES
Q41	Q29 and Q30	JPAB,EPAB,DWPI	None	ADJ	YES
Q42	Q28 and Q30	JPAB,EPAB,DWPI	None	ADJ	YES
Q43	Q28 and Q31	JPAB,EPAB,DWPI	None	ADJ	YES
Q44	Q29 and Q42	JPAB,EPAB,DWPI	None	ADJ	YES
Q45	Q29 and Q43	JPAB,EPAB,DWPI	None	ADJ	YES

Q46	Q40 and Q43	JPAB,EPAB,DWPI	None	ADJ	YES
Q47	Q40 and Q42	JPAB,EPAB,DWPI	None	ADJ	YES

Overwrite Cancel

Help Main Menu Logout

Access DB#_____

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: K. C. SRIVASTAVA Examiner #: 77964 Date: 04/03/2003
Art Unit: 1651 Phone Number 303-605-1196 Serial Number: 09/942,242
Mail Box and Bldg/Room Location: CM1/11B01 Results Format Preferred (circle): PAPER DISK E-MAIL
R.M. # CM1/11A12

If more than n search is submitt d, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: PREPARATION OF BICYCLIC HETEROAROMATIC COMPDS,

Inventors (please provide full names): ANIL S. GAIKWAD, JOHN W. WONG

Earliest Priority Filing Date: 08/09/2000

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search & Conversion ~~of~~ to microbial

from

C
LAMS
1-3

WITH

I Pseudomonas
Cunninghamella
Alternaria
Absidia
Aspergillus
Giumuxella
Penicillium

and mycotoxin.

Formulation organic solvent extraction chromatography purification. } Claim 19

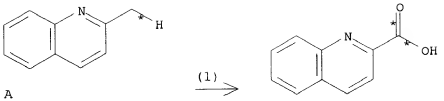
CLAIMS ATTACHED.

RECEIVED
APR -3 2003
TECH CENTER 1600/2900

****

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: Mary	NA Sequence (#)_____	STN _____
Searcher Phone #: _____	AA Sequence (#)_____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr.Link _____
Date Completed: 4/3	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: _____	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: _____	Other _____	Other (specify) _____

PTO-1590 (8-01)



A B

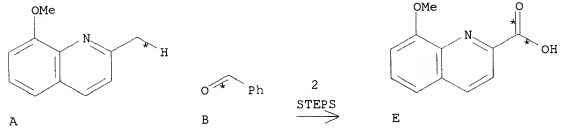
RX(1) RCT A **91-63-4**
PRO B **93-10-7**
CAT 9001-62-1 Lipase
SOL 7732-18-5 Water
NTE enzymic, biotransformation, described media

136:308633 Microbial conversion of bicyclic heteroaromatic compounds. Cawley, James J.; Wong, John W. (USA). U.S. Pat. Appl. Publ. US 20020045225 A1 20020418, 14 pp. (English). CODEN: USXXCO. APPLICATION: US 2001-924292 20010808. PRIORITY: US 2000-PV224089 20000809.

AB The present invention relates to processes for the microbial oxidn. of bicyclic heteroarom. compds. which comprise contacting these compds. with a microorganism, or a suitable mutant thereof, and incubating the resulting mixt. under conditions sufficient to yield an amt. of their resp. carboxylic acids. The present processes optionally further comprise the isolation and purifn. of the product carboxylic acids. Thus, Pseudomonas putida ATCC 33015 converted 3-methylquinoline to 3-quinolinecarboxylic acid with a yield of 9%.

L3 ANSWER 4 OF 22 CASREACT COPYRIGHT 2003 ACS

RX(7) OF 20 COMPOSED OF RX(1), RX(2)
RX(7) **A** + B ===> **E**



A B E

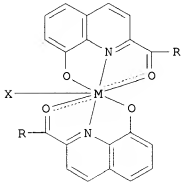
RX(1) RCT A **3033-80-5,** B 100-52-7
PRO C 78224-64-3
SOL 108-24-7 Ac2O
NTE under nitrogen

RX(2) RCT C 78224-64-3
RGT F 7446-08-4 SeO2
PRO E **21141-35-5**
SOL 1330-20-7 Xylene
NTE reflux

Searched by: Mary Hale 308-4258 CM-1 1E01

135:297636 Preparation of 8-hydroxyquinoline-metal complexes and application in electroluminescence. Ouyang, Jianming (Jinan Univ., Peop. Rep. China). Faming Zhuanli Shenqing Gongkai Shuomingshu CN 1282735 A 20010207, 19 pp. (Chinese). CODEN: CNXXEV. APPLICATION: CN 2000-117371 20000826.

GI

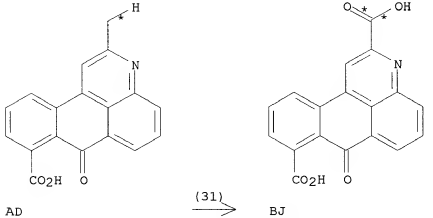


I

AB Title compds. [I; R = O(CH2)11CH3, O(CH2)13CH3, O(CH2)15H3, (CH2)17CH3; M = Mn, Co, Ni, Cu, Zn, Cd, Pb, Ca, Mg, Al, La, Gd, Er; X = Cl, OH, electron pair; dotted bond = bond, no bond] are prepd. by condensing 8-methoxy-2-methylquinoline with benzaldehyde in acetic anhydride at 150-160.degree. under bubbling N2, followed by oxidn. with SeO2 in xylene at 150- 160.degree., hydrolyzing with H3PO4 in the presence of KI at 215-225.degree. to obtain 8-hydroxyquinoline-2-carboxylic acid, and acylating with RBr in the presence of triethylamine at 105-110.degree.. The complexes of the ligand are prepd. from metal halides. Thus, the title compd. I (R = O(CH2)15CH3; X = electron pair; dotted bond = bond) was prepd. The electroluminescence film is manufd. by vacuum vapor deposition at (0.1-5) x 10-3 Pa. The nanometric film is also manufd.

L3 ANSWER 5 OF 22 CASREACT COPYRIGHT 2003 ACS

RX(31) OF 188 ...**AD** ===> **BJ**...



AD

(31)

BJ
YIELD 83%

Searched by: Mary Hale 308-4258 CM-1 1E01

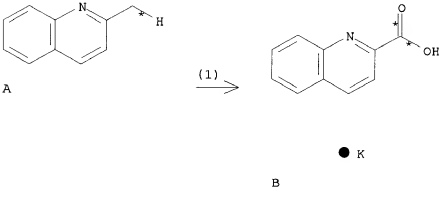
RX(31) RCT AD **348616-74-0**
RGT BD 7558-80-7 NaH2PO4, BE 7758-19-2 NaOClO, BF 513-35-9 Me2C:CHMe
PRO BJ **348616-85-3**
SOL 7732-18-5 Water, 75-65-0 t-BuOH

135:92529 Synthesis and Cytotoxic Activity of 7-Oxo-7H-dibenz[f,ij]isoquinoline and 7-Oxo-7H-benzo[e]perimidine Derivatives. Bu, Xianyong; Deady, Leslie W.; Finlay, Graeme J.; Baguley, Bruce C.; Denny, William A. (Chemistry Department, La Trobe University, Bundoora, 3083, Australia). Journal of Medicinal Chemistry, 44(12), 2004-2014 (English) 2001. CODEN: JMCMAR. ISSN: 0022-2623. Publisher: American Chemical Society.

AB A series of 7-oxo-7H-dibenz[f,ij]isoquinolines and 7-oxo-7H-benzo[e]perimidines bearing cationic side chains were prepd. from aminoanthraquinones. The perimidines were prepd. from 1-aminoanthraquinone by initial condensation with urea or dimethylacetamide. A series of 2-, 4-, 8-, and 11-carboxy derivs. of the dibenzisoquinolines were prepd. from aminoanthraquinonecarboxylic acids. The cationic derivs. were prepd. from these via amide, amine, or methylene linkers to study the effects of side chain positioning on biol. activity. Within the series of carboxamide-linked compds., the order of increasing cytotoxicity was 8- < 4- < 2- < 11-. The 2- and 4-carboxamides showed substantial growth delays against in vivo s.c. colon 38 tumors in mice, but the 11-carboxamide had curative activity in this refractory model and is being investigated further.

L3 ANSWER 6 OF 22 CASREACT COPYRIGHT 2003 ACS

RX(1) OF 1 **A** ===> **B**



RX(1) RCT A **91-63-4**
RGT C 7782-44-7 O2, D 1310-58-3 KOH
PRO B **84356-48-9**
NTE 150.degree. for 3 h, 10% conversion yield with 83% selectivity

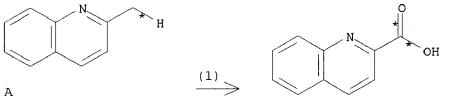
127:248020 Process for preparation of carboxylbenzopyridine derivatives by oxidation. Fujibayashi, Ryoichi; Yamada, Shigeji (Sumikin Kako Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09249649 A2 19970922 Heisei, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-61329 19960318.

AB Characterized is a process for prepn. of the title compds. by oxidn. of alkylbenzopyridine using mol. O in the presence of alkali metal hydroxide in org. solvents. The title compds., useful materials for drugs and pesticides, are prepd. in an industrial manner efficiently and economically under mild condition. Thus, 2-methylquinoline was oxidized

by O in the presence of KOH at 150.degree. for 3 h to give potassium 2-quinolinecarboxylate with 10.1% conversion yield and 82.5% selectivity.

L3 ANSWER 7 OF 22 CASREACT COPYRIGHT 2003 ACS

RX(1) OF 1 **A** ===> **B**



A B

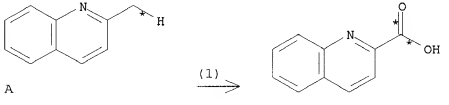
RX(1) RCT A **91-63-4**
RGT C 7782-44-7 O2
PRO B **93-10-7**
CAT 71-48-7 Co(OAc)2, 638-38-0 Mn(OAc)2, 7758-02-3 KBr
SOL 64-19-7 AcOH
NTE 150.degree.

123:228007 Preparation of quinaldic acid. Namekata, Takeshi; Ito, Ikuo; Sato, Toshio (Sumikin Kako Kk, Japan). Jpn. Kokai Tokkyo Koho JP 07188175 A2 19950725 Heisei, 5 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1993-330983 19931227.

AB Quinaldic acid (I) is prepd. by oxidn. of quinaldine (II) by mol. oxygen in the presence of catalysts. Thus, oxidn. of 10.1 g II in 200 mL acetic acid contg. cobalt(II) acetate tetrahydrate 27.29 g, manganese(II) acetate tetrahydrate 26.85 g, and potassium bromide 6.24 g under air at 150.degree. gave I in 64.5 mol% yield, vs. 12 mol% in a ref. process.

L3 ANSWER 8 OF 22 CASREACT COPYRIGHT 2003 ACS

RX(1) OF 2 **A** ===> **B**



A B
YIELD 60%

RX(1) RCT A **91-63-4**
RGT C 865-47-4 t-BuOK, D 7782-44-7 O2
PRO B **93-10-7**
SOL 67-68-5 DMSO
NTE 1 h at 20.degree.

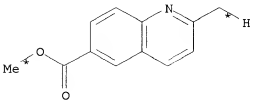
122:265265 Preparation of benzopyridinecarboxylic acids as pharmaceutical and

agrochemical intermediates. Ito, Ikuo; Hasegawa, Tooru; Sato, Toshio (Sumikin Kako Kk, Japan). Jpn. Kokai Tokkyo Koho JP 07048353 A2 19950221 Heisei, 4 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1993-211105 19930804.

AB The title compds. are prepd. by oxidn. of alkylbenzopyridines by mol. oxygen in the presence of alkali metal alcoholates. Oxidn. of 2-methylquinoline in DMSO contg. potassium tert-butoxide under oxygen atm. at 20.degree. gave , after workup, 2-quinolinecarboxylic acid in 60 mol% yield.

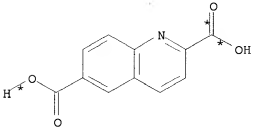
L3 ANSWER 9 OF 22 CASREACT COPYRIGHT 2003 ACS

RX(10) OF 14 COMPOSED OF RX(2), RX(3)
RX(10) **C** ===> **G**



2
STEPS

C



G
YIELD 50%

RX(2) RCT C **108166-01-4**
RGT F 7726-95-6 Br2
PRO E 124551-28-6

RX(3) RCT E 124551-28-6
RGT D 7664-93-9 H2SO4
PRO G **117140-75-7**

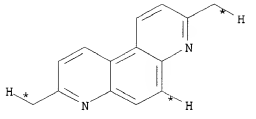
112:36491 Synthesis and characterization of new quinoline monomers. Bottino, F. A.; Di Pasquale, G.; Pollicino, A.; Recca, A.; Staniland, P. A. (Fac. Ing., Univ. Catania, Catania, 95125, Italy). Journal of Heterocyclic Chemistry, 26(4), 929-31 (English) 1989. CODEN: JHTCAD. ISSN: 0022-152X.

AB Quinoline-2,6-dicarboxylic acid and 6-aminoquinoline-2-carboxylic acid were synthesized.

L3 ANSWER 10 OF 22 CASREACT COPYRIGHT 2003 ACS

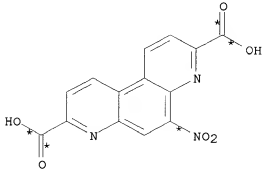
Searched by: Mary Hale 308-4258 CM-1 1E01

RX(2) OF 2 **A** ===> **E**



A

(2)

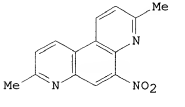


E

RX(2) RCT A **36749-63-0**
RGT C 7697-37-2 HNO3, D 7664-93-9 H2SO4, F 7446-11-9 SO3
PRO E **117561-92-9**
SOL 7697-37-2 HNO3, 7664-93-9 H2SO4

109:230835 Optimization of conditions for nitration of 3,8-dimethyl-4,7-phenanthroline by information cause-and-effect analysis methods. Goldin, A. R.; Savosin, I. V.; Taganov, I. N.; Shaburov, V. V. (USSR). Zhurnal Prikladnoi Khimii (Sankt-Peterburg, Russian Federation), 61(2), 382-8 (Russian) 1988. CODEN: ZPKHAB. ISSN: 0044-4618.

GI



I

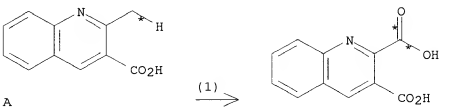
AB The title optimization, with HNO3-H2SO4, to give 22-34% 5-nitro deriv. I,

Searched by: Mary Hale 308-4258 CM-1 1E01

was carried out.

L3 ANSWER 11 OF 22 CASREACT COPYRIGHT 2003 ACS

RX(1) OF 124 **A** ===> **B**

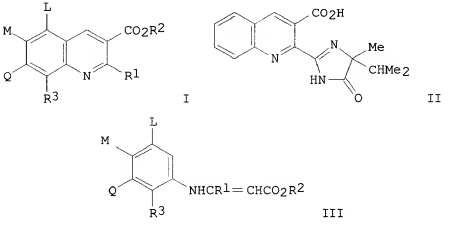


A B

RX(1) RCT A **635-79-0**
RGT C 1310-73-2 NaOH, D 141-52-6 NaOEt, E 7664-41-7 NH3
PRO B **643-38-9**

107:134222 Preparation of substituted 2-methyl-3-quinolinecarboxylic acid and quinoline-2,3-dicarboxylic acid as intermediates for imidazolinylquinoline herbicides. Doehner, Robert F., Jr. (American Cyanamid Co., USA). U.S. US 4656283 A 19870407, 25 pp. Cont.-in-part of U.S. Ser. No. 381,815, abandoned. (English). CODEN: USXXAM. APPLICATION: US 1985-698192 19850204. PRIORITY: US 1982-381815 19820525; US 1983-489401 19830505.

GI



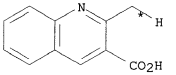
AB A method for the prepn. of quinolines I (R1 = Me, CO2R2; R2 = C1-4 alkyl; L, M, Q, R3 = H, halo, C1-4 alkyl, alkoxy, alkylthio, alkylsulfonyl, haloalkyl, NO2, etc.), useful as intermediates for the prepn. of 2-(2-imidazolin-2-yl)quinoline (II) herbicidal agents, comprised the reaction of an aniline III with an approx. equimolar amt. of ClCH:N+R42.X (R4 = C1-4 alkyl; NR42 forms a 5- or 6-membered ring; X = PO2Cl2-, Cl-) in the presence of an (un)chlorinated hydrocarbon solvent or mixts. thereof at 40-110.degree.. The Vilsmeier reagent from DMF and POCl3 in (CH2Cl)2 was treated with di-Et 3-phenylaminobut-2-enedioate to give I (L, M, Q, R3 = H, R1 = CO2Et, R2 = Et) which was sapond. to the corresponding dicarboxylic acid. This was cyclodehydrated with Ac2O to

Searched by: Mary Hale 308-4258 CM-1 1E01

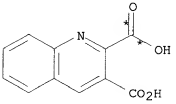
2,3-quinolinedicarboxylic anhydride which was amidated with Me2CHCMe(NH2)CONH2 to give I [R1 = CONHCMe(CHMe2)CONH2, R2 = R3 = L = M = Q = H]. This was cyclized with aq. NaOH to give imidazole II. At 1.0 kg/ha postemergence, II completely killed barnyard grass, green foxtail, wild oats, barley, corn, and sunflower, and almost completely killed purple nutsedge, quackgrass, field bindweed, morning glory, ragweed, velvet leaf, etc.

L3 ANSWER 12 OF 22 CASREACT COPYRIGHT 2003 ACS

RX(1) OF 4 **A** ===> **B**



A

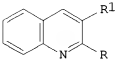


B

RX(1) RCT A **635-79-0**
RGT C 1310-73-2 NaOH
PRO B **643-38-9**
CAT 11099-02-8 Nickel oxide
SOL 7732-18-5 Water

106:4835 Oxidation of methylquinolines with nickel peroxide. Ladner, David W. (Agric. Res. Div., Am. Cyanamid Co., Princeton, NJ, 08560, USA). Synthetic Communications, 16(2), 157-62 (English) 1986. CODEN: SYNCAV. ISSN: 0039-7911.

GI



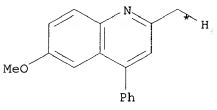
I

AB Oxidn. of quinolinecarboxylic acids I (R = Me, R1 = CO2H; R = CO2H, R1 = Me) with 3.25 equiv nickel peroxide in aq. base at room temp. gave I (R = R1 = CO2H). No reaction occurred with methyl pyridinecarboxylic acids under the same conditions.

L3 ANSWER 13 OF 22 CASREACT COPYRIGHT 2003 ACS

Searched by: Mary Hale 308-4258 CM-1 1E01

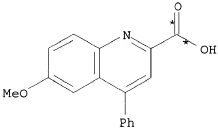
RX(8) OF 10 COMPOSED OF RX(3), RX(7)
RX(8) **G** + H ===> **K**



G

H

2
STEPS



K

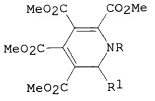
RX(3) RCT G **83640-72-6,** H 100-52-7
RGT J 7646-85-7 ZnCl2
PRO I 83640-69-1

RX(7) RCT I 83640-69-1
RGT Q 7722-64-7 KMnO4, R 7732-18-5 Water
PRO K **345928-12-3**
CAT 110-86-1 Pyridine
SOL 7732-18-5 Water

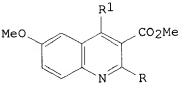
97:215948 The reactions of aromatic Schiff bases with dimethyl acetylenedicarboxylate. I. Reaction in an organic solvent. Murphy, Shane T.; Taylor, Walter C.; Vadasz, Andrew (Dep. Org. Chem., Univ. Sydney, Sydney, 2006, Australia). Australian Journal of Chemistry, 35(6), 1215-25 (English) 1982. CODEN: AJCHAS. ISSN: 0004-9425.

GI

Searched by: Mary Hale 308-4258 CM-1 1E01



I, R=4-MeOC$_6$H$_4$, R^1=Ph
IV, R=Ph, R^1=4-MeOC$_6$H$_4$

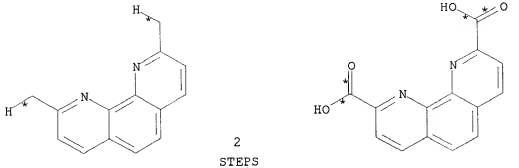


II, R=CO$_2$Me, R^1=Ph
III, R=Ph, R^1=CO$_2$Me

AB The reaction of N-benzylidene-p-anisidine with MeO2CC.tplbond.CCO2Me in refluxing xylene-nitrobenzene gave low yields of bis-adduct I and dehydro-adducts II and III. p-Anisylideneaniline under similar conditions gave dihydropyridine IV and an abnormal bis-adduct. Benzylideneaniline gave only an abnormal bis-adduct.

L3 ANSWER 14 OF 22 CASREACT COPYRIGHT 2003 ACS

RX(9) OF 14 COMPOSED OF RX(2), RX(3)
RX(9) **D** ===> **G**



D

2 STEPS

G
YIELD 61%

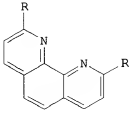
RX(2) RCT D **484-11-7**
RGT F 7446-08-4 SeO2
PRO E 57709-62-3

RX(3) RCT E 57709-62-3
RGT H 7697-37-2 HNO3
PRO G **57709-61-2**

95:97633 Synthesis of some 2,9-disubstituted-1,10-phenanthrolines. Chandler, Christopher J.; Deady, Leslie W.; Reiss, James A. (Org. Chem. Dep., La Trobe Univ., Bundoora, 3083, Australia). Journal of Heterocyclic Chemistry, 18(3), 599-601 (English) 1981. CODEN: JHTCAD. ISSN: 0022-152X.

GI

Searched by: Mary Hale 308-4258 CM-1 1E01

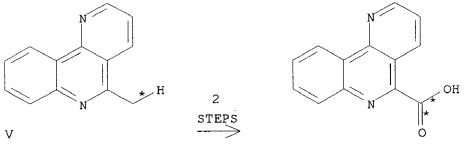


I

AB I (R = Me, CHO, CO2H, CN, CO2Me, CH:NOH, CH2NH2, CH2OH, CH2Br, CBr3, CCl3) were prepd. from 2,9-dimethyl-1,10-phenanthroline. NMR data are also reported.

L3 ANSWER 15 OF 22 CASREACT COPYRIGHT 2003 ACS

RX(14) OF 15 COMPOSED OF RX(10), RX(11)
RX(14) **V** ===> **Z**



V

Z
YIELD 37%

RX(10) RCT V **34016-27-8**
RGT X 7446-08-4 SeO2
PRO W 69164-27-8
SOL 123-91-1 Dioxane

RX(11) RCT W 69164-27-8
RGT AA 7722-84-1 H2O2
PRO Z **69164-28-9**

90:103866 Syntheses of nitrogen-containing heterocyclic compounds. XXXII. On the antimicrobial activity of diazaphenanthrenes and syntheses of triazaphenanthrenes related to nalidixic acid. Takeuchi, Isao; Ozawa, Isao; Ogaki, Toshiro; Hamada, Yoshiki; Ito, Tomiyoshi (Fac. Pharm., Meijo Univ., Nagoya, Japan). Yakugaku Zasshi, 98(9), 1279-85 (Japanese) 1978. CODEN: YKKZAJ. ISSN: 0031-6903.

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

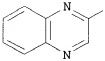
Searched by: Mary Hale 308-4258 CM-1 1E01

L38 ANSWER 2 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
2002:279737 Document No.: PREV200200279737. Microbial conversion of 2-methylquinoxaline. Burns, Michael P. (1); **Cawley, James J.**; **Wong, John W.**. (1) Mystic, CT USA. ASSIGNEE: Pfizer Inc.. Patent Info.: US 6361979 March 26, 2002. Official Gazette of the United States Patent and Trademark Office Patents, (Mar. 26, 2002) Vol. 1256, No. 4, pp. No Pagination. http://www.uspto.gov/web/menu/patdata.html. e-file. ISSN: 0098-1133. Language: English.

AB The present invention relates to processes for the microbial oxidation of 2-methylquinoxaline to 2-quinoxalinecarboxylic acid which comprise contacting 2-methylquinoxaline with a microorganism, or a suitable mutant thereof, and incubating the resulting mixture under conditions sufficient to yield an amount of said 2-quinoxalinecarboxylic acid. The present processes optionally further comprise the isolation and purification of 2-quinoxalinecarboxylic acid.

L38 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS
2002:247243 Document No. 137:32104 Biocatalytic oxidation of 2-methylquinoxaline to 2-quinoxalinecarboxylic acid. **Wong, John W.**; Watson, Harry A., Jr.; Bouressa, James F.; Burns, Michael P.; **Cawley, James J.**; Doro, Albert E.; Guzek, Donald B.; Hintz, Michael A.; McCormick, Ellen L.; Scully, Douglas A.; Siderewicz, Joseph M.; Taylor, William J.; Truesdell, Susan J.; Wax, Richard G. (Bioprocess Research and Development, Pfizer Global Research and Development, Groton, CT, 06340, USA). Organic Process Research & Development, 6(4), 477-481 (English) 2002. CODEN: OPRDFK. ISSN: 1083-6160. OTHER SOURCES: CASREACT 137:32104. Publisher: American Chemical Society.

GI



I R=Me
II R=CO_2H

AB A microbial process using the fungus Absidia repens ATCC 14849 is described for the oxidn. of 2-methylquinoxaline (I) to 2-quinoxalinecarboxylic acid (II). A campaign consisting of 3 14,000-L runs produced 20.5 kg of II with a 28% overall yield. The bioconversion gave a lower yield compared with a 3-step chem. synthesis (35%), but was carried out in 1 pot and avoided safety issues with a di-N-oxide intermediate. Although successfully scaled to produce kilograms of II for synthesis of a drug candidate, the A. repens bioconversion is unsuitable for further scale-up due to low product concn. (.apprx.1 g/L). A 2nd microbial process using Pseudomonas putida ATCC 33015 is also described for the oxidn. of I. The P. putida bioconversion gave an 86% in situ yield at 8-L scale and yielded a product concn. .apprx.10-fold greater than that of the A. repens bioconversion.

L38 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 2
2000:573568 Document No. 133:134260 Microbial oxidation of 2-methylquinoxaline to 2-quinoxalinecarboxylic acid and purification of product from fermentation medium. Burns, Michael Paul; **Cawley, James Joseph**; **Wong, John Wing** (Pfizer Products Inc., USA). Eur.

Searched by: Mary Hale 308-4258 CM-1 1E01

Pat. Appl. EP 1028164 A1 20000816, 20 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: EPXXDW. APPLICATION: EP 2000-300936 20000207. PRIORITY: US 1999-PV119942 19990212.

AB Microbial oxidn. of 2-methylquinoxicrobial to 2-quinoxalinecarboxylic acid comprises contacting 2-methylquinoxaline with a microorganism, or a suitable mutant,.and incubating the resulting mixt. under conditions sufficient to yield an amt. of 2-quinoxalinecarboxylic acid. Process for isolation and purifn. of 2-quinoxalinecarboxylic acid is also described.

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	22.43	715.85
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.95	-25.98

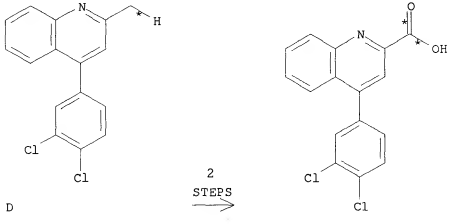
STN INTERNATIONAL LOGOFF AT 13:59:28 ON 03 APR 2003

Searched by: Mary Hale 308-4258 CM-1 1E01

AB 2-Aminoquinoline and 3-amino-1,8-naphthyridine cyclized with EtOCH:C(CO2Et)2 to give pyrimidoquinoline I and triazaphenanthrene II, resp. Hydrolysis of I gave 2-aminoquinoline, whereas Et 4-hydroxy-5-methyl-1,6-phenanthroline-3-carboxylate and II gave 4-hydroxy-5-methyl-1,6-phenanthroline-3-carboxylic acid (III) and 4-hydroxy-1,8,9,-triazaphenanthrene-2-carboxylic acid (IV), resp. N-Alkylation of III, the Et ester of III, and IV gave V, VI, and VII, resp. Methylphenanthroline (VIII) was oxidized with SeO2 to give IX, which was oxidized with H2O2 to give X. Bactericidal testing of the prepd. compds. and diazaphenanthrenes showed that these compds. had antibacterial activity against Pseudomonas aeruginosa.

L3 ANSWER 16 OF 22 CASREACT COPYRIGHT 2003 ACS

RX(19) OF 26 COMPOSED OF RX(2), RX(10)
RX(19) **D** ===> **T**



D

T
YIELD 31%

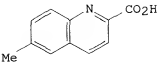
RX(2) RCT D **65714-18-3**
RGT F 7726-95-6 Br2
PRO E 65714-24-1
CAT 64-19-7 AcOH

RX(10) RCT E 65714-24-1
RGT C 7647-01-0 HCl
PRO T **65714-30-9**

89:129370 Conversion of the carboxyl group to the corresponding trichloromethyl group in the quinoline series. Takahashi, Kazuyuki; Mitsuhashi, Keiryo (Coll. Technol., Seikei Univ., Tokyo, Japan). Journal of Heterocyclic Chemistry, 14(5), 881-4 (English) 1977. CODEN: JHTCAD. ISSN: 0022-152X.

GI

Searched by: Mary Hale 308-4258 CM-1 1E01

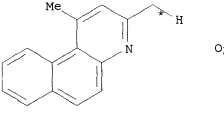


I

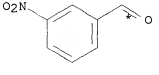
AB Treating the carboxyl groups of quinaldinic acid, I, 6-chloro, 4-phenyl- and 4-(p-chlorophenyl)quinaldinic acids and benzo[f]quinoline-3-carboxylic acid with PBr3 in excess SOCl2 converted them to the trichloromethyl group, whereas those of 8-methyl-, 4-(3,4-dichlorophenyl)-, 4-(p-nitrophenyl)quinaldinic acids and benzo[h]quinoline-2-carboxylic acid were unaffected. The difference in reactivity based on the basicity of the ring N and steric effects. The quinaldinic acids were prepd. by bromination of the 2-methylquinolines followed by hydrolysis of the tribromomethyl derivs.

L3 ANSWER 17 OF 22 CASREACT COPYRIGHT 2003 ACS

RX(6) OF 9 COMPOSED OF RX(2), RX(3)
RX(6) **D** + E ===> **G**

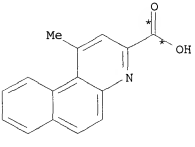


D



E

2 STEPS



G

RX(2) RCT D **834-98-0,** E 99-61-6
PRO F 343572-09-8

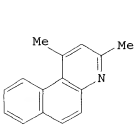
RX(3) RCT F 343572-09-8
PRO G **63359-36-4**

87:53050 Structure and synthesis of Reed's base (1,3-dimethyl-5,6-benzoquinoline). Singh, Prem Narayan; Singh, Nityanand (Dep. Chem., A. N. Coll., Patna, India). Indian Journal of Chemistry, Section B: Organic

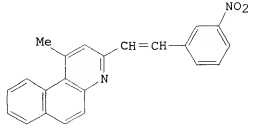
Searched by: Mary Hale 308-4258 CM-1 1E01

Chemistry Including Medicinal Chemistry, 14B(12), 973-4 (English) 1976. CODEN: IJSBDB. ISSN: 0376-4699.

GI



I

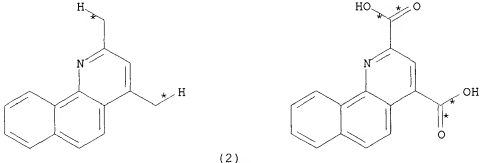


II

AB Reed's base (I) was prepd. by condensation of 2-napthylamine, paraldehyde and Me2CO. I gave benzoquinoline II by refluxing with 3-O2NC6H4CHO in the presence of Ac2O. Oxidn. and subsequent decarboxylation of II gave 1-methyl-5,6-benzoquinoline. Similarly, I gave 1,3-dinitrostyryl-5,6-benzoquinoline, which on oxidn. and subsequent decarboxylation gave 5,6-benzoquinoline. Structure I was also confirmed by IR and UV spectra.

L3 ANSWER 18 OF 22 CASREACT COPYRIGHT 2003 ACS

RX(2) OF 4 **C** ===> **A**...



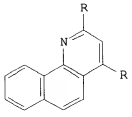
C A

RX(2) RCT C **605-67-4**
RGT D 7446-08-4 SeO2
PRO A **59656-43-8**

85:32801 Chemistry of benzoquinolines. Part VI. Singh, Prem N.; Singh, Nityanand (Dep. Chem., Sci. Coll., Patna, India). Journal of the Indian Chemical Society, 52(11), 1108-9 (English) 1975. CODEN: JICSAH. ISSN: 0019-4522.

GI

Searched by: Mary Hale 308-4258 CM-1 1E01



I

AB Reaction of dimethylbenzoquinoline (I, R = Me) with PhCHO and m-O2NC6H4CHO at elevated temp. in the presence of Ac2O gave I [R = PhCH:CH (II), m-O2NC6H4CH:CH], resp. II was oxidized with KMnO4 in Me2CO and the resultant I (R = CO2H) was decarboxylated with sodalime to I (R = H). I (R = CO2H) was alternatively prepd. by SeO2 oxidn. of I (R = Me).

L3 ANSWER 19 OF 22 CASREACT COPYRIGHT 2003 ACS

RX(18) OF 23 COMPOSED OF RX(5), RX(9)
RX(18) **N** ===> **U**

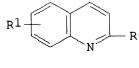
N U

RX(5) RCT N **613-30-9**
RGT C 7446-08-4 SeO2
PRO O 59500-67-3
SOL 123-91-1 Dioxane

RX(9) RCT O 59500-67-3
RGT V 7722-84-1 H2O2
PRO U **30836-96-5**
SOL 67-64-1 Me2CO

85:5470 Synthesis of quinolinacrylic acids and their biological activity. Tadros, W. M.; Shoeb, H. A.; Kira, M. A.; Yousif, F.; Ekladios, Esmat M.; Ibrahim, S. A. (Natl. Res. Cent., Cairo, Egypt). Indian Journal of Chemistry, 13(12), 1366-8 (English) 1975. CODEN: IJOCAP. ISSN: 0019-5103.

GI



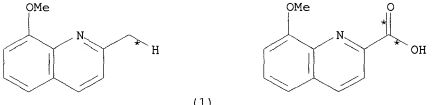
I

Searched by: Mary Hale 308-4258 CM-1 1E01

AB 3-(2-Quinolyl)-1,1,1-trichloropropan-2-ols I [R = CH2CH(OH)CCl3; R1 = 5-, 6-, 8-NO2, 5-Cl] were prepd. by the condensation of the I (R = Me) with Cl3CCHO in the presence of pyridine. I [R = CH2CH(OH)CCl3] on alk. hydrolysis gave I (R = CH:CHCO2H). I (R = CH:CHCO2H; R1 = 6-, 7-, 8-Cl) were prepd. by the Knoevenagel reaction of I (R = CHO). I (R = CO2H, CH:NNHCSNH2) were also prepd. Some I show antibacterial activity and toxicity against snails. Thus, at 50 .mu.g/ml I (R = CH:CHCO2Na, R1 = 8-NO2) inhibited Staphylococcus aureus. I (R = CH:CHCO2Na, R1 = 6-Cl) completely killed Bulinus truncatus.

L3 ANSWER 20 OF 22 CASREACT COPYRIGHT 2003 ACS

RX(1) OF 6 ...**A** ===> **B**...



A B
YIELD 8%

RX(1) RCT A **3033-80-5**
RGT C 7446-08-4 SeO2
PRO B **21141-35-5**
SOL 95-47-6 o-Xylene
NTE Classification: Benzylic oxidation; # Conditions: SeO2 o-xylene; Rf 15mn

50:12356 8-Hydroxyquinaldic acid. Irving, H. M.; Pennington, A. R. (Univ. Oxford, UK). J. Chem. Soc. 3782-5 (Unavailable) 1954.

AB 8-Methoxyquinaldine (I) is converted to 8-hydroxyquinaldic acid (II) via 8-methoxy-2-styrylquinoline (III) and 8-methoxyquinaldic acid (IV). Crotonaldehyde added over 15 min. to a hot soln. of o-anisidine and o-nitrophenol in 10N HCl, the soln. heated 2 hrs., cooled, and carefully neutralized with concd. aq. NaOH gave a semisolid product which was filtered off, washed with H2O, air-dried, and distd. to give 44-9% I, b22-28 145-60.degree., needles, m. 125.degree. (from benzene). I, BzH (V), and Ac2O (VI) refluxed 3 hrs., cooled, poured into H2O, and neutralized with aq. NaOH, gave a viscous solid which was taken up in Et2O, filtered, and satd. with dry HCl to give the hydrochloride of III, yellow needles (from hot 10N HCl), m. 226.degree. (decompn.). An aq. soln. of the hydrochloride of III with dil. NaOH gave III, needles, m. 100.degree. (from aq. alc.). No yield figures are given, but the yield is described as excellent. The properties of III agree closely with those of the 2-(2-hydroxy-2-phenylethyl)-8-methoxyquinoline of Troger and Dunker (C.A. 19, 1278.8). Their prepn. of alleged III from I, V, and ZnCl2 gave the present authors only an amorphous substance (VII) contg. Zn which sintered below 300.degree. but did not melt at 360.degree.. VII was insol. in HCl, HOAc, and all common solvents except cold C5H5N and boiling PhNO2. VII is unchanged by boiling dil. acids or alkalies, and by O3, H2O2, or KMnO4. III (6.3 g.) in C5H5N, cooled in ice-H2O and shaken while 4% aq. KMnO4 was added slowly until the color persisted, the MnO2 filtered

Searched by: Mary Hale 308-4258 CM-1 1E01

off and washed with hot H2O, the combined filtrates concd., filtered while hot, and acidified, gave crude IV, 3.9 g., m. 150.degree., which was crystd. from benzene contg. alc. to give the monohydrate of IV, golden yellow needles, m. 158-9.degree.. The monohydrate crystd. from hot H2O gave the dihydrate of IV, m. 121-2.degree.. The dihydrate is stable in moist air but changes to the monohydrate at 100.degree. or on recrystn. from benzene-alc. Freshly sublimed, powdered SeO2 (6.16 g.) added over 15 min. to 6.36 g. of I in boiling xylene, the Se filtered off, and the solvent evapd. in an air stream, gave yellow crystals and red viscous material. Purification of the yellow crystals gave 0.6 g. of the monohydrate of IV. The red viscous material, extd. with hot benzene, filtered, and the solvent evapd., gave a pale yellow solid and more red material. The yellow solid after fractional crystn. from aq. alc., vacuum sublimation, and a series of recrystns. from H2O gave 8-methoxyquinoline-2-aldehyde, green needles, m. 102.degree. [2,4-dinitrophenylhydrazone, orange plates from 95% alc., m. 260.degree. (decompn.)]. The monohydrate of IV (1.3 g.), KI, and sirupy H3PO4, refluxed at 215-25.degree. until the red color in the condenser disappeared, cooled, and poured into H2O, gave 1.35 g. of crude II; purification by solution in base, acidification, and recrystn. from aq. dioxane gave yellow crystals, m. 211.degree.. II is insol. in light petroleum, benzene, xylene, and CHCl3, sol. in hot alc., dioxane, amyl alc., and glacial HOAc, and readily sol. in Me2CO, dil. alkali, and dil. mineral acids. 8-Hydroxyquinoline (5.2 g.) heated 3 hrs. at 160.degree. with V and VI, cooled, and the resulting oil poured into vigorously stirred H2O, gave a yellow solid. The mixt. was made alk. with 5% aq. NaOH and the ppt. collected and recrystd. successively from aq. alc., aq. dioxane, and petr. ether (b. 60-80.degree.) to give 4.3 g. 8-acetoxy-2-styrylquinoline (VIII), pale brown needles, m. 119-20.degree., insol. in 2N NaOH. VIII (5.5 g.) refluxed 2 hrs. with 5% aq. NaOH, and the mixt. neutralized with 5N HCl gave 3.2 g. 8-hydroxy-2-styrylquinoline, m. 102-3.degree., which could be oxidized with cold KMnO4 to II, but in variable yield.

L3 ANSWER 21 OF 22 CASREACT COPYRIGHT 2003 ACS

RX(3) OF 3 COMPOSED OF RX(2), RX(1)
RX(3) **D** ===> **B**

D

B
YIELD 16%

RX(2) RCT D **881-07-2**
RGT E 7726-95-6 Br2, F 127-09-3 AcONa
PRO A 73257-75-7
SOL 64-19-7 AcOH
NTE Classification: Bromination; # Conditions: Br2 AcOH NaOAc; 15mn Rf

RX(1) RCT A 73257-75-7

Searched by: Mary Hale 308-4258 CM-1 1E01

RGT C 7664-93-9 H2SO4
PRO B **15733-85-4**
NTE Classification: Hydrolysis; # Conditions: H2SO4 24h Rf

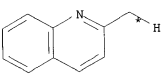
49:46267 Metallic ions and biological activity. XXV. Several derivatives of 8-aminoquinaldinic acid. Roth, R.; Erlenmeyer, H. (Univ. Basel, Switz.). Helv. Chim. Acta, 37, 1064-8 (German) 1954.

AB 2-H2NC6H4NO2 (46 g.) was mixed with 70 ml. concd. aq. HCl, cooled to 10.degree., 50 ml. 38% paraldehyde added with stirring, the mixt. kept 1-2 hrs. at 30-5.degree., heated 5 hrs. under reflux, the brown mixt. added to 750 ml. cold H2O, filtered to remove resinous material, the filtrate made alk. with concd. NaOH soln., the brown ppt. extd. with C6H6, the C6H6 evapd., the residue dissolved in MeOH, decolorized with bone C, crystd. and recrystd. from EtOH to give 10-15 g. 8-nitroquinaldine (I), m. 129-31.degree.. I (6 g.) in MeOH was hydrogenated at atm. pressure in presence of Raney Ni, filtered, decolorized with bone C, and the MeOH evapd. to give an oil which was recrystd. from petr. ether as 3.5 g. 8-aminoquinaldine (II), m. 57-8.degree.. II, treated 0.5 hr. with excess of Ac2O, poured into cold H2O, neutralized with Na2CO3, the oil taken up in Et2O, the Et2O evapd., and residue recrystd. from petr. ether, gave N-acetyl-8-aminoquinaldine (III), m. 77-8.degree.. III (11.6 g.), 7 g. BzH, and 4 g. Ac2O were heated 24 hrs. at 150.degree., cooled, poured in 40 ml. 10% NaOH, boiled 0.5 hr., acidified with concd. aq. HCl, filtered to remove resinous material, the ppt. sepd. from the cooled filtrate suspended in dil. NaOH, extd. with Et2O, the Et2O evapd., the residue distd. at 110.degree. (0.06 mm.), and the distillate recrystd. from MeOH-H2O, gave 0.1 g. 2-styryl-8-aminoquinoline (IV), m. 129-30.degree.. To 2 g. IV, suspended in 100 ml. H2O, was slowly added 5.0 g. KMnO4 in 100 ml. H2O with cooling, the mixt. stirred 1 hr. at room temp., filtered, the filtrate evapd. to small vol., acidified with HNO3 to pH 1-2, BzOH extd. with Et2O, the aq. soln. brought to pH 5-6 with NH3, satd. Cu(OAc)2 soln. added (avoiding excess), the Cu salt suspended in hot H2O, decompd. with H2S, the residue extd. with hot petr. ether, and the crystals which sepd. on cooling recrystd. from H2O, to give 8-aminoquinaldinic acid (V), m. 161-3.degree.. IV (0.8 g.) was refluxed 15 min. with 0.4 g. Ac2O, cooled, poured into H2O, and neutralized with Na2CO3, to obtain N-acetyl-2-styryl-8-aminoquinoline, m. 101-2.degree. (from EtOH-petr. ether). I (7 g.) was dissolved in 150 ml. glacial AcOH, the hot soln. satd. with anhyd. AcONa, 7 ml. Br in 50 ml. AcOH added, heated 15 min. during which NaBr pptd., filtered, the filtrate added to H2O, and the ppt. recrystd. from EtOH-petr. ether to give 16 g. 2-tribromomethyl-8-nitroquinoline (VI), m. 130-1.degree.. VI (15-g.), boiled 24 hrs. with 500 ml. 20% H2SO4, after cooling, filtering, and neutralizing to pH 3, yielded 1.2 g. 8-nitroquinaldinic acid (VII), m. 181-2.degree.. VII (1.6 g.), esterified with CH2N2 in 50 ml. Et2O, gave 1.2 g. VII Me ester (VIII) m. 125-6.degree. (from MeOH). VIII, treated 6 hrs. with excess of 25% NH4OH, gave VII amide, m. 256-7.degree.. Hydrogenation of 1 g. VII at atm. pressure in 50 ml. MeOH with Raney Ni gave 0.6 g. V, m. 162-4.degree. (from petr. ether and H2O). VIII (2 g.), hydrogenated in 100 ml. MeOH with Raney Ni, yielded 1.4 g. V Me ester (IX), m. 97-8.degree. (from petr. ether). IX, treated 3 hrs. with 25% NH4OH, gave V amide-1/2H2O, m. 153-6.degree. (from EtOH); V amide, m. 174-6.degree.. IX, treated with MeNH2 soln. gave V N-methylamide, m. 149-50.degree. after sublimation in vacuo and recrystn. from MeOH-H2O. IX, treated with N2H4.H2O in MeOH, after prolonged standing at -15.degree. gives long yellow needles of V hydrazide, m. 203-5.degree. (from EtOH). IX (1 g.) in Et2O was added to 0.15 g. LiAlH4 in Et2O, warmed 15 min. on water bath, cooled, acidified with 10% H2SO4 to a clear soln., then made strongly alk. with NaOH, the Et2O layer sepd., the aq. layer twice reextd. with Et2O and combined Et2O exts. evapd. to give 2-hydroxymethyl-8-aminoquinoline, m. 92-4.degree. (from petr. ether).

Searched by: Mary Hale 308-4258 CM-1 1E01

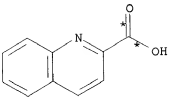
L3 ANSWER 22 OF 22 CASREACT COPYRIGHT 2003 ACS

RX(3) OF 3 COMPOSED OF RX(2), RX(1)
RX(3) **E** ===> **B**



E

2
STEPS



B
YIELD 95%

RX(2) RCT E **91-63-4**
RGT F 7726-95-6 Br2, G 127-09-3 AcONa
PRO A 613-53-6
SOL 64-19-7 AcOH
NTE Classification: Bromination; # Conditions: Br2 NaOAc AcOH; 70-75 deg ; 90-95 deg 1h; 20 deg overnight

RX(1) RCT A 613-53-6
RGT C 7664-93-9 H2SO4
PRO B **93-10-7**
SOL 7732-18-5 Water
NTE Classification: Hydrolysis; # Conditions: H2SO4 H2O; 10h 120 deg

40:37317 Quinoline series. V. Preparation of some .alpha.-dialkylaminomethyl-2-quinolinemethanols. Campbell, Kenneth N.; Helbing, Clarence H.; Kerwin, James F. (Univ. of Notre Dame, IN). J. Am. Chem. Soc., 68, 1840-3 (Unavailable) 1946. CODEN: JACSAT. ISSN: 0002-7863.

AB Quinaldic acid was prepd. in 90-8% yield from .alpha.-tribromoquinaldine and 1:10 H2SO4; the Et ester and AcOEt yield 90% of the Na salt (I) which with cold dil. acid yields Et quinaldoylacetate, yellow, m. 63-4.degree.; I (60.7 g.) and 46 ml. concd. H2SO4 in 1450 ml. H2O, heated at 95-105.degree. for 7 hrs., give 76% of 2-acetylquinoline (II), m. 47.5-8.degree.. Hydrogenation of II in aq. or abs. EtOH over Pt oxide at room temp. gives methyl-2-quinolylcarbinol, m. 81-2.degree.; in aq. EtOH contg. a little HCl, the main product is the pinacol, C22H20N2O2, m. 142.5-4.degree.. II (26.3 g.) in 60 ml. 40% HBr, treated at 63-7.degree. with 26.4 g. Br in 35 ml. 40% HBr and the mixt. kept at 65.degree. for 1 hr., gives 85% of the HBr salt (III), m. 214-16.degree. (decompn.), of 2-bromoacetylquinoline (IV), m. 81-2.degree.. III (3.31 g.) and 5 g. Et2NH in 25 ml. ether at 0.degree. (N atm.) for 1.5 hrs., the Et2NH.HBr removed and the residue in 50 ml. abs. EtOH hydrogenated over Pt oxide at room temp. and 3 atm., give .alpha.-diethylaminomethyl-2-quinolinemethanol (SN 8105), whose dipicrate (1.5 g. yield) m. 125-6.degree.; di-HCl salt, m. 109-10.degree., very hygroscopic; 1,1'-methylenebis(2-hydroxy-3-naphthoate), m. 285-90.degree. (decompn.). IV (5.6 g.) and 7 g. Pr2NH in 60 ml. C6H6 similarly give the .alpha.-dipropylaminomethyl deriv (SN 9795), whose HCl salt m. 110.degree., very hygroscopic; 1,1'-methylenebis[2-hydroxy-3-naphthoate], with 1 mol. H2O, m. 216.degree. (yield 5.8 g.). IV (5 g.) and 6 g. (iso-Bu)2NH give 3.7 g. of the 1,1'-methylenebis[2-hydroxy-3-naphthoate], with 2 mols. H2O, m. 250.degree., of the .alpha.-diisobutylaminomethyl deriv. (SN 7998); the

.alpha.-butylethylaminomethyl analog (SN 7994), with 2 mols. H2O, m. 220-3.degree.. 6-Methoxyquinaldine (25 g.), 20 g. BzH, and 1.5 g. ZnCl2, heated at 150-60.degree. for 4 hrs., give 80-95% (crude) of 6-methoxy-2-styrylquinoline, pale yellow, m. 147-8.degree.; oxidation with KMnO4 in 50% C5H5N gives 85-95% of 6-methoxyquinaldic acid, m. 182.degree. (HCl salt, m. 217-18.degree.); Et ester, m. 127.5-8.degree.; Et 6-methoxyquinaldoylacetate, m. 64-6.degree., 80%; 20% H2SO4 at 90.degree. for 1 hr. gives 98% of 6-methoxy-2-acetylquinoline, m. 97.5-8.5.degree. (HBr salt, m. 189.degree.; semicarbazone, m. 237-8.degree.); Br in 24% HBr gives a poor yield of 6-methoxy-2-bromoacetylquinoline, m. 122.degree.; Br in CHCl3 gives a dibromide, m. 143-6.degree.; HBr salt, m. 193.degree.; the free base did not react normally with Et2NH. m-ClC6H4NH2.HCl and MeC(OMe)2CH2CH2OMe give about 30% of 7-chloroquinaldine, m. 74.5-6.degree.; 7-chloro-2-styrylquinoline, yellow, m. 125-7.degree., 73%; KMnO4 in Me2CO at 0-10.degree. gives 87% of 7-chloroquinaldic acid (V), m. 213.degree. (decompn.); Et ester, bl 155-7.degree., m. 72-4.degree. (75-80%); 7-chloro-2-acetylquinoline, m. 87-8.5.degree., 27% (HBr salt, m. 324.degree.). V (15 g.) and 75 ml. SOCl2, refluxed 2 hrs. and the acid chloride reacted with CH2N2, give 65% of 7-chloro-2-bromoacetylquinoline, light yellow, m. 117-18.degree.; HBr salt, m. 215.degree.; although the salt appears to react with Et2NH, an amino alc. could not be obtained. 7-Chloro-2-chloroacetylquinoline, m. 127-9.degree., 45%; reduction with (iso-PrO)3Al in iso-PrOH gives a yellow compd., m. 134-5.degree., probably methyl(7-chloro-2-quinolyl)carbinol.

=> fil caplus;s l3 crossover from CASREACT

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	93.64	199.52
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-13.64	-14.26

FILE 'CAPLUS' ENTERED AT 13:53:41 ON 03 APR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 3 Apr 2003 VOL 138 ISS 14
FILE LAST UPDATED: 2 Apr 2003 (20030402/ED)

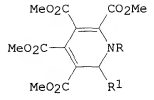
This file contains CAS Registry Numbers for easy and accurate substance identification.

L4 22 L3 duplicates

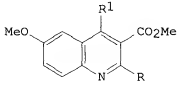
Searched by: Mary Hale 308-4258 CM-1 1E01

```
=> s l4 and (cunningham? or alternar? or absid? or aspergill? or giomerell? or
penicill?)
          1646 CUNNINGHAM?
          5433 ALTERNAR?
           739 ABSID?
         42177 ASPERGILL?
             0 GIOMERELL?
         62405 PENICILL?
L5           1 L4 AND (CUNNINGHAM? OR ALTERNAR? OR ABSID? OR ASPERGILL? OR
               GIOMERELL? OR PENICILL?)

=> d cbib abs hitstr

L5   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2003 ACS
2002:294175   Document No. 136:308633  Microbial conversion of
     bicyclic heteroaromatic compounds.  Cawley, James J.; Wong, John W. (USA).
       U.S. Pat. Appl. Publ. US 20020045225 A1 20020418, 14 pp.  (English).
     CODEN: USXXCO.  APPLICATION: US 2001-924292 20010808.  PRIORITY: US
     2000-PV224089 20000809.
AB   The present invention relates to processes for the microbial oxidn. of
     bicyclic heteroarom. compds. which comprise contacting these compds. with
     a microorganism, or a suitable mutant thereof, and incubating the
     resulting mixt. under conditions sufficient to yield an amt. of their
     resp. carboxylic acids.  The present processes optionally further comprise
     the isolation and purifn. of the product carboxylic acids.  Thus,
     Pseudomonas putida ATCC 33015 converted 3-methylquinoline to
     3-quinolinecarboxylic acid with a yield of 9%.


=> s l4 and mycotox?
          8206 MYCOTOX?
L6           0 L4 AND MYCOTOX?

=> s l4 and (organic solvent or extract? or chromatograp? or purif?)
        290272 ORGANIC
          3347 ORGANICS
        292458 ORGANIC
                 (ORGANIC OR ORGANICS)
        798130 ORG
         12291 ORGS
        802427 ORG
                 (ORG OR ORGS)
        893295 ORGANIC
                 (ORGANIC OR ORG)
        570522 SOLVENT
        282505 SOLVENTS
        720583 SOLVENT
                 (SOLVENT OR SOLVENTS)
        121699 ORGANIC SOLVENT
                 (ORGANIC(W)SOLVENT)
        236068 EXTRACT?
        264617 EXT
        198041 EXTS
        415531 EXT
                 (EXT OR EXTS)
        319696 EXTD
             6 EXTDS
        319698 EXTD
                 (EXTD OR EXTDS)


Searched by: Mary Hale 308-4258 CM-1 1E01
```

```
         43875 EXTG
             1 EXTGS
         43876 EXTG
                 (EXTG OR EXTGS)
        338077 EXTN
         11648 EXTNS
        343051 EXTN
                 (EXTN OR EXTNS)
        955174 EXTRACT?
                 (EXTRACT? OR EXT OR EXTD OR EXTG OR EXTN)
        369581 CHROMATOGRAP?
        543532 CHROMATOG
          3004 CHROMATOGS
        545708 CHROMATOG
                 (CHROMATOG OR CHROMATOGS)
        683592 CHROMATOGRAP?
                 (CHROMATOGRAP? OR CHROMATOG)
        689780 PURIF?
L7           5 L4 AND (ORGANIC SOLVENT OR EXTRACT? OR CHROMATOGRAP? OR PURIF?)

=> d l1-5 cbib abs

L7   ANSWER 1 OF 5  CAPLUS  COPYRIGHT 2003 ACS
2002:294175   Document No. 136:308633  Microbial conversion of
     bicyclic heteroaromatic compounds.  Cawley, James J.; Wong, John W. (USA).
       U.S. Pat. Appl. Publ. US 20020045225 A1 20020418, 14 pp.  (English).
     CODEN: USXXCO.  APPLICATION: US 2001-924292 20010808.  PRIORITY: US
     2000-PV224089 20000809.
AB   The present invention relates to processes for the microbial oxidn. of
     bicyclic heteroarom. compds. which comprise contacting these compds. with
     a microorganism, or a suitable mutant thereof, and incubating the
     resulting mixt. under conditions sufficient to yield an amt. of their
     resp. carboxylic acids.  The present processes optionally further comprise
     the isolation and purifn. of the product carboxylic acids.
     Thus, Pseudomonas putida ATCC 33015 converted 3-methylquinoline to
     3-quinolinecarboxylic acid with a yield of 9%.

L7   ANSWER 2 OF 5  CAPLUS  COPYRIGHT 2003 ACS
1997:630782   Document No. 127:248020  Process for preparation of
     carboxylbenzopyridine derivatives by oxidation.  Fujibayashi, Ryoichi;
     Yamada, Shigeji (Sumikin Kako Co., Ltd., Japan).  Jpn. Kokai Tokkyo Koho
     JP 09249649 A2 19970922 Heisei, 6 pp.  (Japanese).  CODEN: JKXXAF.
     APPLICATION: JP 1996-61329 19960318.
AB   Characterized is a process for prepn. of the title compds. by oxidn. of
     alkylbenzopyridine using mol. O in the presence of alkali metal hydroxide
     in org. solvents.  The title compds., useful materials
     for drugs and pesticides, are prepd. in an industrial manner efficiently
     and economically under mild condition.  Thus, 2-methylquinoline was
     oxidized by O in the presence of KOH at 150.degree. for 3 h to give
     potassium 2-quinolinecarboxylate with 10.1% conversion yield and 82.5%
     selectivity.

L7   ANSWER 3 OF 5  CAPLUS  COPYRIGHT 2003 ACS
1982:615948   Document No. 97:215948  The reactions of aromatic
     Schiff bases with dimethyl acetylenedicarboxylate.  I.  Reaction in an
     organic solvent.  Murphy, Shane T.; Taylor, Walter C.;
     Vadasz, Andrew (Dep. Org. Chem., Univ. Sydney, Sydney, 2006, Australia).
     Australian Journal of Chemistry, 35(6), 1215-25 (English) 1982.  CODEN:
     AJCHAS.  ISSN: 0004-9425.  OTHER SOURCES: CASREACT 97:215948.
GI


Searched by: Mary Hale 308-4258 CM-1 1E01
```



I, R=4-MeOC$_6$H$_4$, R^1=Ph
IV, R=Ph, R^1=4-MeOC$_6$H$_4$



II, R=CO$_2$Me, R^1=Ph
III, R=Ph, R^1=CO$_2$Me

AB The reaction of N-benzylidene-p-anisidine with MeO2CC.tplbond.CCO2Me in refluxing xylene-nitrobenzene gave low yields of bis-adduct I and dehydro-adducts II and III. p-Anisylideneaniline under similar conditions gave dihydropyridine IV and an abnormal bis-adduct. Benzylideneaniline gave only an abnormal bis-adduct.

L7 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS
1956:12356 Document No. **50:12356** Original Reference No. 50:2592c-i,2593a 8-Hydroxyquinaldic acid. Irving, H. M.; Pennington, A. R. (Univ. Oxford, UK). J. Chem. Soc. 3782-5 (Unavailable) 1954.
AB 8-Methoxyquinaldine (I) is converted to 8-hydroxyquinaldic acid (II) via 8-methoxy-2-styrylquinoline (III) and 8-methoxyquinaldic acid (IV). Crotonaldehyde added over 15 min. to a hot soln. of o-anisidine and o-nitrophenol in 10N HCl, the soln. heated 2 hrs., cooled, and carefully neutralized with concd. aq. NaOH gave a semisolid product which was filtered off, washed with H2O, air-dried, and distd. to give 44-9% I, b22-28 145-60.degree., needles, m. 125.degree. (from benzene). I, BzH (V), and Ac2O (VI) refluxed 3 hrs., cooled, poured into H2O, and neutralized with aq. NaOH, gave a viscous solid which was taken up in Et2O, filtered, and satd. with dry HCl to give the hydrochloride of III, yellow needles (from hot 10N HCl), m. 226.degree. (decompn.). An aq. soln. of the hydrochloride of III with dil. NaOH gave III, needles, m. 100.degree. (from aq. alc.). No yield figures are given, but the yield is described as excellent. The properties of III agree closely with those of the 2-(2-hydroxy-2-phenylethyl)-8-methoxyquinoline of Troger and Dunker (C.A. 19, 1278.8). Their prepn. of alleged III from I, V, and ZnCl2 gave the present authors only an amorphous substance (VII) contg. Zn which sintered below 300.degree. but did not melt at 360.degree.. VII was insol. in HCl, HOAc, and all common solvents except cold C5H5N and boiling PhNO2. VII is unchanged by boiling dil. acids or alkalies, and by O3, H2O2, or KMnO4. III (6.3 g.) in C5H5N, cooled in ice-H2O and shaken while 4% aq. KMnO4 was added slowly until the color persisted, the MnO2 filtered off and washed with hot H2O, the combined filtrates concd., filtered while hot, and acidified, gave crude IV, 3.9 g., m. 150.degree., which was crystd. from benzene contg. alc. to give the monohydrate of IV, golden yellow needles, m. 158-9.degree.. The monohydrate crystd. from hot H2O gave the dihydrate of IV, m. 121-2.degree.. The dihydrate is stable in moist air but changes to the monohydrate at 100.degree. or on recrystn. from benzene-alc. Freshly sublimed, powdered SeO2 (6.16 g.) added over 15

min. to 6.36 g. of I in boiling xylene, the Se filtered off, and the solvent evapd. in an air stream, gave yellow crystals and red viscous material. **Purification** of the yellow crystals gave 0.6 g. of the monohydrate of IV. The red viscous material, **extd.** with hot benzene, filtered, and the solvent evapd., gave a pale yellow solid and more red material. The yellow solid after fractional crystn. from aq. alc., vacuum sublimation, and a series of recrystns. from H2O gave 8-methoxyquinoline-2-aldehyde, green needles, m. 102.degree. [2,4-dinitrophenylhydrazone, orange plates from 95% alc., m. 260.degree. (decompn.)]. The monohydrate of IV (1.3 g.), KI, and sirupy H3PO4, refluxed at 215-25.degree. until the red color in the condenser disappeared, cooled, and poured into H2O, gave 1.35 g. of crude II; **purification** by solution in base, acidification, and recrystn. from aq. dioxane gave yellow crystals, m. 211.degree.. II is insol. in light petroleum, benzene, xylene, and CHCl3, sol. in hot alc., dioxane, amyl alc., and glacial HOAc, and readily sol. in Me2CO, dil. alkali, and dil. mineral acids. 8-Hydroxyquinoline (5.2 g.) heated 3 hrs. at 160.degree. with V and VI, cooled, and the resulting oil poured into vigorously stirred H2O, gave a yellow solid. The mixt. was made alk. with 5% aq. NaOH and the ppt. collected and recrystd. successively from aq. alc., aq. dioxane, and petr. ether (b. 60-80.degree.) to give 4.3 g. 8-acetoxy-2-styrylquinoline (VIII), pale brown needles, m. 119-20.degree., insol. in 2N NaOH. VIII (5.5 g.) refluxed 2 hrs. with 5% aq. NaOH, and the mixt. neutralized with 5N HCl gave 3.2 g. 8-hydroxy-2-styrylquinoline, m. 102-3.degree., which could be oxidized with cold KMnO4 to II, but in variable yield.

L7 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS

1955:46267 Document No. **49:46267** Original Reference No. 49:8954d-i,8955a-c Metallic ions and biological activity. XXV. Several derivatives of 8-aminoquinaldinic acid. Roth, R.; Erlenmeyer, H. (Univ. Basel, Switz.). Helv. Chim. Acta, 37, 1064-8 (German) 1954.

AB 2-H2NC6H4NO2 (46 g.) was mixed with 70 ml. concd. aq. HCl, cooled to 10.degree., 50 ml. 38% paraldehyde added with stirring, the mixt. kept 1-2 hrs. at 30-5.degree., heated 5 hrs. under reflux, the brown mixt. added to 750 ml. cold H2O, filtered to remove resinous material, the filtrate made alk. with concd. NaOH soln., the brown ppt. **extd.** with C6H6, the C6H6 evapd., the residue dissolved in MeOH, decolorized with bone C, crystd. and recrystd. from EtOH to give 10-15 g. 8-nitroquinaldine (I), m. 129-31.degree.. I (6 g.) in MeOH was hydrogenated at atm. pressure in presence of Raney Ni, filtered, decolorized with bone C, and the MeOH evapd. to give an oil which was recrystd. from petr. ether as 3.5 g. 8-aminoquinaldine (II), m. 57-8.degree.. II, treated 0.5 hr. with excess of Ac2O, poured into cold H2O, neutralized with Na2CO3, the oil taken up in Et2O, the Et2O evapd., and residue recrystd. from petr. ether, gave N-acetyl-8-aminoquinaldine (III), m. 77-8.degree.. III (11.6 g.), 7 g. BzH, and 4 g. Ac2O were heated 24 hrs. at 150.degree., cooled, poured in 40 ml. 10% NaOH, boiled 0.5 hr., acidified with concd. aq. HCl, filtered to remove resinous material, the ppt. sepd. from the cooled filtrate suspended in dil. NaOH, **extd.** with Et2O, the Et2O evapd., the residue distd. at 110.degree. (0.06 mm.), and the distillate recrystd. from MeOH-H2O, gave 0.1 g. 2-styryl-8-aminoquinoline (IV), m. 129-30.degree.. To 2 g. IV, suspended in 100 ml. H2O, was slowly added 5.0 g. KMnO4 in 100 ml. H2O with cooling, the mixt. stirred 1 hr. at room temp., filtered, the filtrate evapd. to small vol., acidified with HNO3 to pH 1-2, BzOH **extd.** with Et2O, the aq. soln. brought to pH 5-6 with NH3, satd. Cu(OAc)2 soln. added (avoiding excess), the Cu salt suspended in hot H2O, decompd. with H2S, the residue **extd.** with hot petr. ether, and the crystals which sepd. on cooling recrystd. from H2O, to give 8-aminoquinaldinic acid (V), m. 161-3.degree.. IV (0.8 g.)

Searched by: Mary Hale 308-4258 CM-1 1E01

was refluxed 15 min. with 0.4 g. Ac2O, cooled, poured into H2O, and neutralized with Na2CO3, to obtain N-acetyl-2-styryl-8-aminoquinoline, m. 101-2.degree. (from EtOH-petr. ether). I (7 g.) was dissolved in 150 ml. glacial AcOH, the hot soln. satd. with anhyd. AcONa, 7 ml. Br in 50 ml. AcOH added, heated 15 min. during which NaBr pptd., filtered, the filtrate added to H2O, and the ppt. recrystd. from EtOH-petr. ether to give 16 g. 2-tribromomethyl-8-nitroquinoline (VI), m. 130-1.degree.. VI (15-g.), boiled 24 hrs. with 500 ml. 20% H2SO4, after cooling, filtering, and neutralizing to pH 3, yielded 1.2 g. 8-nitroquinaldinic acid (VII), m. 181-2.degree.. VII (1.6 g.), esterified with CH2N2 in 50 ml. Et2O, gave 1.2 g. VII Me ester (VIII) m. 125-6.degree. (from MeOH). VIII, treated 6 hrs. with excess of 25% NH4OH, gave VII amide, m. 256-7.degree.. Hydrogenation of 1 g. VII at atm. pressure in 50 ml. MeOH with Raney Ni gave 0.6 g. V, m. 162-4.degree. (from petr. ether and H2O). VIII (2 g.), hydrogenated in 100 ml. MeOH with Raney Ni, yielded 1.4 g. V Me ester (IX), m. 97-8.degree. (from petr. ether). IX, treated 3 hrs. with 25% NH4OH, gave V amide-1/2H2O, m. 153-6.degree. (from EtOH); V amide, m. 174-6.degree.. IX, treated with MeNH2 soln. gave V N-methylamide, m. 149-50.degree. after sublimation in vacuo and recrystn. from MeOH-H2O. IX, treated with N2H4.H2O in MeOH, after prolonged standing at -15.degree. gives long yellow needles of V hydrazide, m. 203-5.degree. (from EtOH). IX (1 g.) in Et2O was added to 0.15 g. LiAlH4 in Et2O, warmed 15 min. on water bath, cooled, acidified with 10% H2SO4 to a clear soln., then made strongly alk. with NaOH, the Et2O layer sepd., the aq. layer twice reextd. with Et2O and combined Et2O **exts**. evapd. to give 2-hydroxymethyl-8-aminoquinoline, m. 92-4.degree. (from petr. ether).

```
=> select l7
ENTER ANSWER NUMBER OR RANGE (1-):1-5
ENTER DISPLAY CODE (TI) OR ?:rn
E1 THROUGH E38 ASSIGNED
```

print RN from 5 hits above

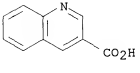
```
=> fil reg;s e1-38
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                               36.24     235.76

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)    SINCE FILE      TOTAL
                                                   ENTRY    SESSION
CA SUBSCRIBER PRICE                               -3.91     -18.17

FILE 'REGISTRY' ENTERED AT 13:55:04 ON 03 APR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:    2 APR 2003  HIGHEST RN 501410-52-2
DICTIONARY FILE UPDATES:   2 APR 2003  HIGHEST RN 501410-52-2

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.


Searched by: Mary Hale 308-4258 CM-1 1E01
```

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

1 612-58-8/BI
(612-58-8/RN)
1 91-63-4/BI
(91-63-4/RN)
1 100-51-6/BI
(100-51-6/RN)
1 100-52-7/BI
(100-52-7/RN)
1 10517-21-2/BI
(10517-21-2/RN)
1 1075-35-0/BI
(1075-35-0/RN)
1 1125-80-0/BI
(1125-80-0/RN)
1 126-33-0/BI
(126-33-0/RN)
1 1310-58-3/BI
(1310-58-3/RN)
1 1310-73-2/BI
(1310-73-2/RN)
1 141-78-6/BI
(141-78-6/RN)
1 1477-50-5/BI
(1477-50-5/RN)
1 16907-79-2/BI
(16907-79-2/RN)
1 195719-65-4/BI
(195719-65-4/RN)
1 195719-66-5/BI
(195719-66-5/RN)
1 21873-63-2/BI
(21873-63-2/RN)
1 46870-92-2/BI
(46870-92-2/RN)
1 491-35-0/BI
(491-35-0/RN)
1 538-51-2/BI
(538-51-2/RN)
1 611-32-5/BI
(611-32-5/RN)
1 6480-68-8/BI
(6480-68-8/RN)
1 6624-49-3/BI
(6624-49-3/RN)
1 762-42-5/BI
(762-42-5/RN)
1 783-08-4/BI
(783-08-4/RN)
1 836-41-9/BI
(836-41-9/RN)
1 83640-65-7/BI
(83640-65-7/RN)
1 83640-66-8/BI
(83640-66-8/RN)

Searched by: Mary Hale 308-4258 CM-1 1E01

```
             1 83640-67-9/BI
                 (83640-67-9/RN)
             1 83640-68-0/BI
                 (83640-68-0/RN)
             1 83640-69-1/BI
                 (83640-69-1/RN)
             1 83640-70-4/BI
                 (83640-70-4/RN)
             1 83640-71-5/BI
                 (83640-71-5/RN)
             1 83640-72-6/BI
                 (83640-72-6/RN)
             1 84356-48-9/BI
                 (84356-48-9/RN)
             1 86-59-9/BI
                 (86-59-9/RN)
             1 92-52-4/BI
                 (92-52-4/RN)
             1 93-10-7/BI
                 (93-10-7/RN)
             1 95-20-5/BI
                 (95-20-5/RN)
L8          38 (612-58-8/BI OR 91-63-4/BI OR 100-51-6/BI OR 100-52-7/BI OR
               10517-21-2/BI OR 1075-35-0/BI OR 1125-80-0/BI OR 126-33-0/BI OR
               1310-58-3/BI OR 1310-73-2/BI OR 141-78-6/BI OR 1477-50-5/BI OR
               16907-79-2/BI OR 195719-65-4/BI OR 195719-66-5/BI OR 21873-63-2/
               BI OR 46870-92-2/BI OR 491-35-0/BI OR 538-51-2/BI OR 611-32-5/BI
                OR 6480-68-8/BI OR 6624-49-3/BI OR 762-42-5/BI OR 783-08-4/BI
               OR 836-41-9/BI OR 83640-65-7/BI OR 83640-66-8/BI OR 83640-67-9/B
               I OR 83640-68-0/BI OR 83640-69-1/BI OR 83640-70-4/BI OR 83640-71
               -5/BI OR 83640-72-6/BI OR 84356-48-9/BI OR 86-59-9/BI OR 92-52-4
               /BI OR 93-10-7/BI OR 95-20-5/BI)

=> d 1-38 ide cbib

L8   ANSWER 1 OF 38  REGISTRY  COPYRIGHT 2003 ACS
RN   195719-66-5  REGISTRY
CN   3-Quinolinecarboxylic acid, potassium salt (9CI)  (CA INDEX NAME)
MF   C10 H7 N O2 . K
SR   CA
LC   STN Files:   CA, CAPLUS
CRN  (6480-68-8)
```



● K

```
             1 REFERENCES IN FILE CA (1962 TO DATE)
             1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE  1:  127:248020  Process for preparation of carboxylbenzopyridine
     derivatives by oxidation.  Fujibayashi, Ryoichi; Yamada, Shigeji (Sumikin


Searched by: Mary Hale 308-4258 CM-1 1E01
```

Kako Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09249649 A2 19970922 Heisei, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-61329 19960318.

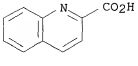
L8 ANSWER 2 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **195719-65-4** REGISTRY
CN 4-Quinolinecarboxylic acid, potassium salt (9CI) (CA INDEX NAME)
MF C10 H7 N O2 . K
SR CA
LC STN Files: CA, CAPLUS
CRN (486-74-8)

● K

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 127:248020 Process for preparation of carboxylbenzopyridine derivatives by oxidation. Fujibayashi, Ryoichi; Yamada, Shigeji (Sumikin Kako Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09249649 A2 19970922 Heisei, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-61329 19960318.

L8 ANSWER 3 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **84356-48-9** REGISTRY
CN 2-Quinolinecarboxylic acid, potassium salt (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Potassium quinaldinate
MF C10 H7 N O2 . K
LC STN Files: CA, CAPLUS, CASREACT, GMELIN*, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
CRN (93-10-7)



● K

9 REFERENCES IN FILE CA (1962 TO DATE)
9 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 132:160333 Alkali metal complexes: mixed ligand complexes of alkali metal salts of some organic acids with o-hydroxyacetophenone

Searched by: Mary Hale 308-4258 CM-1 1E01

hydrazone. Mahmood, Shahnawaz; Sinha, P. C. (Department of Chemistry, B.N. College, Patna, 800 004, India). Asian Journal of Chemistry, 12(1), 89-92 (English) 2000. CODEN: AJCHEW. ISSN: 0970-7077. Publisher: Asian Journal of Chemistry.

REFERENCE 2: 127:248020 Process for preparation of carboxylbenzopyridine derivatives by oxidation. Fujibayashi, Ryoichi; Yamada, Shigeji (Sumikin Kako Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09249649 A2 19970922 Heisei, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-61329 19960318.

REFERENCE 3: 121:147576 Alkali metal complexes: mixed ligand complexes of alkali metal salts of picolinic acid, quinaldinic acid and their N-oxide with 1,10-phenanthroline and 2,2'-bipyridyl. Prakash, D.; Prasad, S.S.; Chandra, R.; Gupta, O. P. (Chem. Dep., Patna Univ., Patna, India). Acta Ciencia Indica, Chemistry, 18(4), 349-52 (English) 1992. CODEN: ACICDV. ISSN: 0253-7338.

REFERENCE 4: 121:25402 Alkali metal complexes: mixed-ligand complexes of alkali metal salts of picolinic acid, quinaldinic acid and their N-oxides with ethylenediamine and propylenediamine. Prakash, D.; Prasad, S. S.; Gupta, O. P. (Chem. Dep., Patna Univ., Patna, 800 005, India). Journal of the Indian Chemical Society, 70(2), 147-8 (English) 1993. CODEN: JICSAH. ISSN: 0019-4522.

REFERENCE 5: 120:288452 Alkali metal complexes: mixed-ligand complexes of alkali metal salts of picolinic acid, quinaldinic acid and their N-oxides with 1, 10-phenanthroline mono-N-oxide. Prakash, D.; Prasad, S.S.; Chandra, R.; Gupta, O.P. (Chem. Dep., Patna Univ., Patna, 800 005, India). Asian Journal of Chemistry, 5(4), 916-919 (English) 1993. CODEN: AJCHEW. ISSN: 0970-7077.

REFERENCE 6: 111:23643 Anionic tetracarbonyl 2-carboxypyridinato or 2-carboxyquinolinato tungsten(0). Reactions with mercury(II) derivatives. Campo, J. A.; Cano, M.; Perpinan, M. F.; Sanchez-Pelaez, A. E. (Fac. Cienc. Quim., Univ. Complutense, Madrid, 28040, Spain). Journal of Organometallic Chemistry, 345(3), 299-311 (English) 1988. CODEN: JORCAI. ISSN: 0022-328X.

REFERENCE 7: 106:166070 Alkali generating process. Hirai, Hiroyuki; Yabuki, Yoshiharu; Sato, Kozo (Fuji Photo Film Co., Ltd. , Japan). Eur. Pat. Appl. EP 210659 A2 19870204, 65 pp. DESIGNATED STATES: R: DE, GB. (English). CODEN: EPXXDW. APPLICATION: EP 1986-110567 19860730. PRIORITY: JP 1985-169585 19850731; JP 1985-229720 19851015.

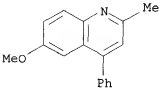
REFERENCE 8: 100:220569 Alkali metal complexes: complexes of alkali metals with quinaldinic acid. Prakash, Dharm; Singh, Shankar Prasad (Dep. Chem., Patna Univ., Patna, 800005, India). Polyhedron, 3(2), 243-6 (English) 1984. CODEN: PLYHDE. ISSN: 0277-5387.

REFERENCE 9: 98:72621 Preparation of 14-substituted derivatives of carminomycin and rubomycin. Olsuf'eva, E. N.; Povarov, L. S.; Salimova, E. I.; Potapova, N. P. (Inst. New Antibiot., Moscow, USSR). Antibiotiki (Moscow), 27(10), 732-7 (Russian) 1982. CODEN: ANTBAL. ISSN: 0003-5637.

L8 ANSWER 4 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **83640-72-6** REGISTRY
CN Quinoline, 6-methoxy-2-methyl-4-phenyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C17 H15 N O

Searched by: Mary Hale 308-4258 CM-1 1E01

CI COM
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)

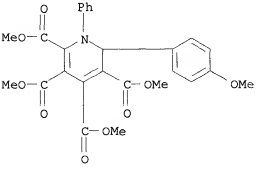


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 97:215948 The reactions of aromatic Schiff bases with dimethyl acetylenedicarboxylate. I. Reaction in an organic solvent. Murphy, Shane T.; Taylor, Walter C.; Vadasz, Andrew (Dep. Org. Chem., Univ. Sydney, Sydney, 2006, Australia). Australian Journal of Chemistry, 35(6), 1215-25 (English) 1982. CODEN: AJCHAS. ISSN: 0004-9425.

L8 ANSWER 5 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **83640-71-5** REGISTRY
CN 2,3,4,5-Pyridinetetracarboxylic acid, 1,6-dihydro-6-(4-methoxyphenyl)-1-phenyl-, tetramethyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H25 N O9
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)



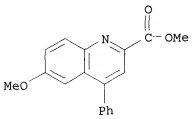
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 97:215948 The reactions of aromatic Schiff bases with dimethyl acetylenedicarboxylate. I. Reaction in an organic solvent. Murphy, Shane T.; Taylor, Walter C.; Vadasz, Andrew (Dep. Org. Chem., Univ. Sydney, Sydney, 2006, Australia). Australian Journal of Chemistry, 35(6), 1215-25 (English) 1982. CODEN: AJCHAS. ISSN: 0004-9425.

Searched by: Mary Hale 308-4258 CM-1 1E01

L8 ANSWER 6 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **83640-70-4** REGISTRY
CN 2-Quinolinecarboxylic acid, 6-methoxy-4-phenyl-, methyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C18 H15 N O3
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)

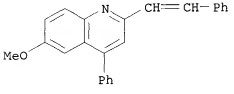


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 97:215948 The reactions of aromatic Schiff bases with dimethyl acetylenedicarboxylate. I. Reaction in an organic solvent. Murphy, Shane T.; Taylor, Walter C.; Vadasz, Andrew (Dep. Org. Chem., Univ. Sydney, Sydney, 2006, Australia). Australian Journal of Chemistry, 35(6), 1215-25 (English) 1982. CODEN: AJCHAS. ISSN: 0004-9425.

L8 ANSWER 7 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **83640-69-1** REGISTRY
CN Quinoline, 6-methoxy-4-phenyl-2-(2-phenylethenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C24 H19 N O
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)



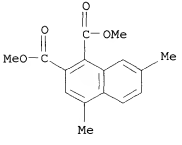
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 97:215948 The reactions of aromatic Schiff bases with dimethyl acetylenedicarboxylate. I. Reaction in an organic solvent. Murphy, Shane T.; Taylor, Walter C.; Vadasz, Andrew (Dep. Org. Chem., Univ. Sydney, Sydney, 2006, Australia). Australian Journal of Chemistry, 35(6), 1215-25 (English) 1982. CODEN: AJCHAS. ISSN: 0004-9425.

Searched by: Mary Hale 308-4258 CM-1 1E01

L8 ANSWER 8 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **83640-68-0** REGISTRY
CN 1,2-Naphthalenedicarboxylic acid, 4,7-dimethyl-, dimethyl ester (6CI, 9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C16 H16 O4
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)



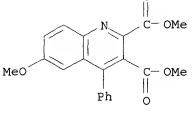
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 97:215948 The reactions of aromatic Schiff bases with dimethyl acetylenedicarboxylate. I. Reaction in an organic solvent. Murphy, Shane T.; Taylor, Walter C.; Vadasz, Andrew (Dep. Org. Chem., Univ. Sydney, Sydney, 2006, Australia). Australian Journal of Chemistry, 35(6), 1215-25 (English) 1982. CODEN: AJCHAS. ISSN: 0004-9425.

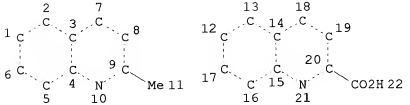
REFERENCE 2: 51:81332 p-Mentha-1,5,8(9)-triene and its pyrolysis to dehydroocimene. Alder, Kurt; Schumacher, Marianne (Univ. Cologne, Germany). Chem. Ber., 89, 2485-97 (Unavailable) 1956.

L8 ANSWER 9 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **83640-67-9** REGISTRY
CN 2,3-Quinolinedicarboxylic acid, 6-methoxy-4-phenyl-, dimethyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C20 H17 N O5
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)



Searched by: Mary Hale 308-4258 CM-1 1E01

```
=> fil casrea;dis his
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                        ENTRY    SESSION
FULL ESTIMATED COST                                      2.80     105.88

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                        ENTRY    SESSION
CA SUBSCRIBER PRICE                                      0.00      -0.62

FILE 'CASREACT' ENTERED AT 13:52:47 ON 03 APR 2003
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.

FILE CONTENT:1907 - 30 Mar 2003 VOL 138 ISS 13

Some records from 1974 to 1991 are derived from the ZIC/VINITI data file
and provided by InfoChem and some records are produced using some INPI
data from the period prior to 1986.

This file contains CAS Registry Numbers for easy and accurate substance
identification.

Crossover limits have been increased.  See HELP RNCROSSOVER for details.

Structure search limits have been raised.  See HELP SLIMIT for the new,
higher limits.


     (FILE 'HOME' ENTERED AT 13:49:32 ON 03 APR 2003)

     FILE 'CASREACT' ENTERED AT 13:49:40 ON 03 APR 2003
L1             STR
L2               0 S L1
L3              22 S L1 FUL

     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE' ENTERED AT 13:51:44 ON 03 APR 2003

     FILE 'CASREACT' ENTERED AT 13:52:47 ON 03 APR 2003

=> d l3 que stat;d 1-22 l3 fhit cbib abs
L1             STR
```




```
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED


Searched by: Mary Hale 308-4258 CM-1 1E01
```

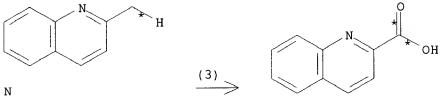
GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE
L3 22 SEA FILE=CASREACT SSS FUL L1 (34 REACTIONS)

100.0% DONE 1980 VERIFIED 34 HIT RXNS 22 DOCS
SEARCH TIME: 00.00.01

L3 ANSWER 1 OF 22 CASREACT COPYRIGHT 2003 ACS

RX(3) OF 10 **N** ===> **O**



N

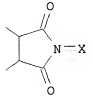
O
YIELD 49%

RX(3) RCT N **91-63-4**
RGT E 7782-44-7 O2
PRO O **93-10-7**
CAT 524-38-9 N-Hydroxyphthalimide, 10102-44-0 NO2, 71-48-7 Co(OAc)2, 638-38-0 Mn(OAc)2
SOL 64-19-7 AcOH

137:154705 Preparation of adamantanols using catalysts containing imides and nitrogen oxides. Ishii, Yasutaka; Nakano, Tatsuya; Tatsumi, Atsuo (Daicel Chemical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002226404 A2 20020814, 18 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-70781 20010313. PRIORITY: JP 2000-361973 20001128.

GI

Q =



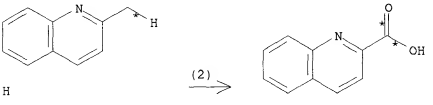
AB O-contg. org. compds. are prepd. by reaction of radical-producing compds. with O-contg. reactants (excluding nitrogen oxides) in the presence of

Searched by: Mary Hale 308-4258 CM-1 1E01

imides having skeletons Q (X = O, OR; R = H, OH-protecting group) and catalytic amt. of nitrogen oxides. Adamantane was reacted in the presence of N-hydroxyphthalimide, vanadium acetylacetonate, and NO2 in AcOH under 0.1 MPa O at 55.degree. for 6 h to give 1-adamantanol 35, 1,3-adamantanediol 20, 1,3,5-adamantanetriol 2, and adamantanone 6%.

L3 ANSWER 2 OF 22 CASREACT COPYRIGHT 2003 ACS

RX(2) OF 5 **H** ===> **I**



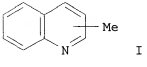
H

I
YIELD 64%

RX(2) RCT H **91-63-4**
RGT C 10102-44-0 NO2
PRO I **93-10-7**
CAT 524-38-9 N-Hydroxyphthalimide
SOL 64-19-7 AcOH
NTE aerobic oxidn.

137:6075 Remarkable effect of nitrogen dioxide for N-hydroxyphthalimide-catalyzed aerobic oxidation of methylquinolines. Sakaguchi, Satoshi; Shibamoto, Akihiro; Ishii, Yasutaka (Department of Applied Chemistry, Faculty of Engineering, Kansai University, Suita, Osaka, 564-8680, Japan). Chemical Communications (Cambridge, United Kingdom) (2), 180-181 (English) 2002. CODEN: CHCOFS. ISSN: 1359-7345. Publisher: Royal Society of Chemistry.

GI



I

AB Aerobic oxidn. of methylquinolines I was successfully achieved by the use of N-hydroxyphthalimide/Co(OAc)2/Mn(OAc)2 as catalyst in the presence of a small amt. of nitrogen dioxide as an initiator.

L3 ANSWER 3 OF 22 CASREACT COPYRIGHT 2003 ACS

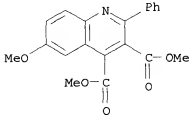
RX(1) OF 6 **A** ===> **B**

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 97:215948 The reactions of aromatic Schiff bases with dimethyl acetylenedicarboxylate. I. Reaction in an organic solvent. Murphy, Shane T.; Taylor, Walter C.; Vadasz, Andrew (Dep. Org. Chem., Univ. Sydney, Sydney, 2006, Australia). Australian Journal of Chemistry, 35(6), 1215-25 (English) 1982. CODEN: AJCHAS. ISSN: 0004-9425.

L8 ANSWER 10 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **83640-66-8** REGISTRY
CN 3,4-Quinolinedicarboxylic acid, 6-methoxy-2-phenyl-, dimethyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C20 H17 N O5
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

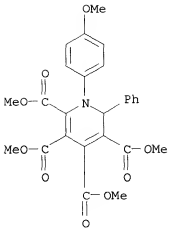
2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 113:58883 The reaction of imidoyl radicals with multiple carbon-carbon bonds. Leardini, Rino; Nanni, Daniele; Tundo, Antonio; Zanardi, Giuseppe (Dip. Chim. Org., Univ. Bologna, Bologna, I-40136, Italy). Gazzetta Chimica Italiana, 119(12), 637-41 (English) 1989. CODEN: GCITA9. ISSN: 0016-5603.

REFERENCE 2: 97:215948 The reactions of aromatic Schiff bases with dimethyl acetylenedicarboxylate. I. Reaction in an organic solvent. Murphy, Shane T.; Taylor, Walter C.; Vadasz, Andrew (Dep. Org. Chem., Univ. Sydney, Sydney, 2006, Australia). Australian Journal of Chemistry, 35(6), 1215-25 (English) 1982. CODEN: AJCHAS. ISSN: 0004-9425.

L8 ANSWER 11 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **83640-65-7** REGISTRY
CN 2,3,4,5-Pyridinetetracarboxylic acid, 1,6-dihydro-1-(4-methoxyphenyl)-6-phenyl-, tetramethyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H25 N O9
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)

Searched by: Mary Hale 308-4258 CM-1 1E01

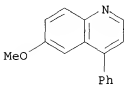


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 97:215948 The reactions of aromatic Schiff bases with dimethyl acetylenedicarboxylate. I. Reaction in an organic solvent. Murphy, Shane T.; Taylor, Walter C.; Vadasz, Andrew (Dep. Org. Chem., Univ. Sydney, Sydney, 2006, Australia). Australian Journal of Chemistry, 35(6), 1215-25 (English) 1982. CODEN: AJCHAS. ISSN: 0004-9425.

L8 ANSWER 12 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **46870-92-2** REGISTRY
CN Quinoline, 6-methoxy-4-phenyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C16 H13 N O
CI COM
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, TOXCENTER
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1962 TO DATE)
5 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 129:41107 Radical annulations with nitriles: novel cascade reactions of cyano-substituted alkyl and sulfanyl radicals with isonitriles. Camaggi, Carlo Maurizio; Leardini, Rino; Nanni, Daniele; Zanardi, Giuseppe (Dipartimento di Chimica Organica "A. Mangini", Universita di Bologna, Bologna, I-40136, Italy). Tetrahedron, 54(21), 5587-5598 (English) 1998. CODEN: TETRAB. ISSN: 0040-4020. Publisher:

Searched by: Mary Hale 308-4258 CM-1 1E01

Elsevier Science Ltd..

REFERENCE 2: 123:338804 Radical annulations and cyclizations with isonitriles: the fate of the intermediate imidoyl and cyclohexadienyl radicals. Nanni, Daniele; Pareschi, Patrizia; Rizzoli, Corrado; Sgarabotto, Paolo; Tundo, Antonio (Dip. Chim. Org. "A. Mangini", Univ. Bologna, Bologna, I-40136, Italy). Tetrahedron, 51(33), 9045-62 (English) 1995. CODEN: TETRAB. ISSN: 0040-4020. Publisher: Elsevier.

REFERENCE 3: 97:215948 The reactions of aromatic Schiff bases with dimethyl acetylenedicarboxylate. I. Reaction in an organic solvent. Murphy, Shane T.; Taylor, Walter C.; Vadasz, Andrew (Dep. Org. Chem., Univ. Sydney, Sydney, 2006, Australia). Australian Journal of Chemistry, 35(6), 1215-25 (English) 1982. CODEN: AJCHAS. ISSN: 0004-9425.

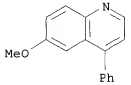
REFERENCE 4: 94:15668 Synthesis and biological properties of some heterocyclic derivatives of guanidine. Shvedov, V. I.; Vasil'eva, V. F.; Korsakova, I. Ya.; Galitsina, V. A.; Medvedev, B. A.; Novitskaya, N. A.; Lapaeva, N. B.; Pershin, G. N.; Mashkovskii, M. D. (Vses. Nauchno-Issled. Khim.-Farm. Inst., Moscow, USSR). Khimiko-Farmatsevticheskii Zhurnal, 14(8), 38-43 (Russian) 1980. CODEN: KHFZAN. ISSN: 0023-1134.

REFERENCE 5: 87:53052 Cyclization of .beta.-arylaminopropiophenones into 4-substituted quinolines. Dienys, G.; Gureviciene, J.; Cekuoliene, L.; Steponavicius, J. (V. Kapsukas State Univ., Vilnius, USSR). Lietuvos TSR Mokslu Akademijos Darbai, Serija B: Chemija, Technika, Fizine Geografija (1), 33-8 (Russian) 1977. CODEN: LMDBAL. ISSN: 0132-2729.

L8 ANSWER 13 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **21873-63-2** REGISTRY
CN Quinoline, 6-methoxy-4-phenyl-, compd. with 2,4,6-trinitrophenol (1:1) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Quinoline, 6-methoxy-4-phenyl-, monopicrate (8CI)
MF C16 H13 N O . C6 H3 N3 O7
LC STN Files: CA, CAPLUS

CM 1

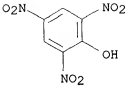
CRN 46870-92-2
CMF C16 H13 N O



CM 2

CRN 88-89-1
CMF C6 H3 N3 O7

Searched by: Mary Hale 308-4258 CM-1 1E01

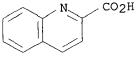


2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 97:215948 The reactions of aromatic Schiff bases with dimethyl acetylenedicarboxylate. I. Reaction in an organic solvent. Murphy, Shane T.; Taylor, Walter C.; Vadasz, Andrew (Dep. Org. Chem., Univ. Sydney, Sydney, 2006, Australia). Australian Journal of Chemistry, 35(6), 1215-25 (English) 1982. CODEN: AJCHAS. ISSN: 0004-9425.

REFERENCE 2: 70:87514 Cyclization of .beta.-arylaminopropiophenons to 4-substituted quinolines. Dienys, G.; Cekuliene, L.; Jokubaityte, S.; Buckus, P. (Vil'nyus. Gos. Univ. im. Kapsukasa, Vilnius, USSR). Khim. Geterotsikl. Soedin., Sb. 1: Azotsoderzhashchie Geterotsikly, 260-2. Editor(s): Hillers, S. Izd. "Zinatne": Riga, USSR. (Russian) 1967. CODEN: 20NNA2.

L8 ANSWER 14 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **16907-79-2** REGISTRY
CN 2-Quinolinecarboxylic acid, sodium salt (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Quinaldic acid, sodium salt (8CI)
OTHER NAMES:
CN Quinaldinic acid sodium salt
CN Sodium quinaldate
CN Sodium quinaldinate
MF C10 H7 N O2 . Na
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMCATS, GMELIN*, TOXCENTER
(*File contains numerically searchable property data)
CRN (93-10-7)



● Na

17 REFERENCES IN FILE CA (1962 TO DATE)
17 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 132:160333 Alkali metal complexes: mixed ligand complexes of alkali metal salts of some organic acids with o-hydroxyacetophenone hydrazone. Mahmood, Shahnawaz; Sinha, P. C. (Department of Chemistry, B.N. College, Patna, 800 004, India). Asian Journal of Chemistry, 12(1), 89-92 (English) 2000. CODEN: AJCHEW. ISSN: 0970-7077. Publisher: Asian Journal of Chemistry.

Searched by: Mary Hale 308-4258 CM-1 1E01

REFERENCE 2: 127:248020 Process for preparation of carboxylbenzopyridine derivatives by oxidation. Fujibayashi, Ryoichi; Yamada, Shigeji (Sumikin Kako Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09249649 A2 19970922 Heisei, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-61329 19960318.

REFERENCE 3: 121:179767 Syntheses of heterocyclic carboxylic derivatives of bis(.eta.5-cyclopentadieny)zirconium (IV). Chen, Hongming; Ying, Wei; Zhou, Yaokun (Coll. Pharmacol., Beijing Coll. Med., Beijing, 100083, Peop. Rep. China). Huaxue Tongbao (2), 32-4 (Chinese) 1994. CODEN: HHTPAU. ISSN: 0441-3776.

REFERENCE 4: 121:147576 Alkali metal complexes: mixed ligand complexes of alkali metal salts of picolinic acid, quinaldinic acid and their N-oxide with 1,10-phenanthroline and 2,2'-bipyridyl. Prakash, D.; Prasad, S.S.; Chandra, R.; Gupta, O. P. (Chem. Dep., Patna Univ., Patna, India). Acta Ciencia Indica, Chemistry, 18(4), 349-52 (English) 1992. CODEN: ACICDV. ISSN: 0253-7338.

REFERENCE 5: 121:25402 Alkali metal complexes: mixed-ligand complexes of alkali metal salts of picolinic acid, quinaldinic acid and their N-oxides with ethylenediamine and propylenediamine. Prakash, D.; Prasad, S. S.; Gupta, O. P. (Chem. Dep., Patna Univ., Patna, 800 005, India). Journal of the Indian Chemical Society, 70(2), 147-8 (English) 1993. CODEN: JICSAH. ISSN: 0019-4522.

REFERENCE 6: 120:288452 Alkali metal complexes: mixed-ligand complexes of alkali metal salts of picolinic acid, quinaldinic acid and their N-oxides with 1, 10-phenanthroline mono-N-oxide. Prakash, D.; Prasad, S.S.; Chandra, R.; Gupta, O.P. (Chem. Dep., Patna Univ., Patna, 800 005, India). Asian Journal of Chemistry, 5(4), 916-919 (English) 1993. CODEN: AJCHEW. ISSN: 0970-7077.

REFERENCE 7: 113:142206 Positive electrostatographic triboelectric charge-providing member. Minamitani, Toshiki; Yamaguchi, Kimitoshi (Ricoh Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 01259387 A2 19891017 Heisei, 11 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1988-88585 19880411.

REFERENCE 8: 112:139257 Organolanthanoids. XV. The preparation of carboxylatobis(cyclopentadienyl)ytterbium(III) complexes by oxidation of bis(cyclopentadienyl)ytterbium(II). Deacon, Glen B.; Wilkinson, Dallas L. (Chem. Dep., Monash Univ., Clayton, 3168, Australia). Australian Journal of Chemistry, 42(6), 845-54 (English) 1989. CODEN: AJCHAS. ISSN: 0004-9425.

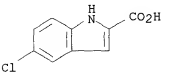
REFERENCE 9: 100:220569 Alkali metal complexes: complexes of alkali metals with quinaldinic acid. Prakash, Dharm; Singh, Shankar Prasad (Dep. Chem., Patna Univ., Patna, 800005, India). Polyhedron, 3(2), 243-6 (English) 1984. CODEN: PLYHDE. ISSN: 0277-5387.

REFERENCE 10: 98:72621 Preparation of 14-substituted derivatives of carminomycin and rubomycin. Olsuf'eva, E. N.; Povarov, L. S.; Salimova, E. I.; Potapova, N. P. (Inst. New Antibiot., Moscow, USSR). Antibiotiki (Moscow), 27(10), 732-7 (Russian) 1982. CODEN: ANTBAL. ISSN: 0003-5637.

L8 ANSWER 15 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **10517-21-2** REGISTRY
CN 1H-Indole-2-carboxylic acid, 5-chloro- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:

Searched by: Mary Hale 308-4258 CM-1 1E01

CN Indole-2-carboxylic acid, 5-chloro- (6CI, 7CI, 8CI)
OTHER NAMES:
CN 5-Chloro-1H-indole-2-carboxylic acid
CN 5-Chloroindole-2-carboxylic acid
FS 3D CONCORD
MF C9 H6 Cl N O2
CI COM
LC STN Files: BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, EMBASE, IFICDB, IFIPAT, IFIUDB, MEDLINE, RTECS*, SYNTHLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

80 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
80 REFERENCES IN FILE CAPLUS (1962 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:205076 Preparation of diamines as factor Xa inhibitors. Ohta, Toshiharu; Komoriya, Satoshi; Yoshino, Toshiharu; Uoto, Kouichi; Nakamoto, Yumi; Naito, Hiroyuki; Mochizuki, Akiyoshi; Nagata, Tsutomu; Kanno, Hideyuki; Haginoya, Noriyasu; Yoshikawa, Kenji; Nagamochi, Masatoshi; Kobayashi, Syozo; Ono, Makoto (Daiichi Pharmaceutical Co., Ltd., Japan). PCT Int. Appl. WO 2003016302 A1 20030227, 847 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (Japanese). CODEN: PIXXD2. APPLICATION: WO 2002-JP8119 20020808. PRIORITY: JP 2001-243046 20010809; JP 2001-311808 20011009; JP 2001-398708 20011228; WO 2002-JP2683 20020320; WO 2002-JP6141 20020620.

REFERENCE 2: 138:170073 Preparation of N-[2-[3-[(4-aminomethyl)phenyl]propylamino]ethyl]amides as human .beta.-tryptase inhibitors for treatment of respiratory diseases, allergic diseases, inflammatory intestinal diseases, hyperprolliferative skin diseases, vascular edema, and rheumatoid arthritis. Kato, Yutaka; Miyazaki, Yutaka; Shimada, Hiroyasu; Manabe, Tadashi; Shiromizu, Ikuya; Okamoto, Atsushi (Mochida Pharmaceutical Co., Ltd., Japan). PCT Int. Appl. WO 2003011812 A1 20030213, 189 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT,

Searched by: Mary Hale 308-4258 CM-1 1E01

TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (Japanese). CODEN: PIXXD2. APPLICATION: WO 2002-JP7843 20020801. PRIORITY: JP 2001-233818 20010801.

REFERENCE 3: 138:153555 Preparation of piperidinyl piperazine and piperidine derivatives as thrombolytic agents. Wiley, Michael Robert; Liebeschuetz, John Walter; Sall, Daniel Jon (Eli Lilly and Company, USA). PCT Int. Appl. WO 2003010160 A2 20030206, 63 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-US21292 20020724. PRIORITY: US 2001-PV307634 20010726; US 2001-PV311462 20010813; US 2001-PV339317 20011212.

REFERENCE 4: 138:89801 Preparation of heterocyclic moiety-containing diamine derivatives as FXa inhibitors. Ohta, Toshiharu; Komoriya, Satoshi; Yoshino, Toshiharu; Uoto, Kouichi; Nakamoto, Yumi; Naito, Hiroyuki; Mochizuki, Akiyoshi; Nagata, Tsutomu; Kanno, Hideyuki; Haginoya, Noriyasu; Yoshikawa, Kenji; Nagamochi, Masatoshi; Kobayashi, Syozo; Ono, Makoto (Daiichi Pharmaceutical Co., Ltd., Japan). PCT Int. Appl. WO 2003000680 A1 20030103, 811 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (Japanese). CODEN: PIXXD2. APPLICATION: WO 2002-JP6141 20020620. PRIORITY: JP 2001-187105 20010620; JP 2001-243046 20010809; JP 2001-311808 20011009; JP 2001-398708 20011228; WO 2002-JP2683 20020320.

REFERENCE 5: 137:232678 Preparation of piperazinylcarbonylindoles as histamine H4 antagonists.. Carruthers, Nicholas I.; Chai, Wenying; Dvorak, Curt A.; Edwards, James P.; Grice, Cheryl A.; Jablonowski, Jill A.; Karlsson, Lars; Khatuya, Haripada; Kreisberg, Jennifer D.; Kwok, Annette K.; Lovenberg, Timothy W.; Ly, Kiev S.; Pio, Barbara; Shah, Chandravadan R.; Sun, Siquan; Thurmond, Robin L.; Wei, Jianmei; Xiao, Wei (Ortho-McNeil Pharmaceutical, Inc., USA). PCT Int. Appl. WO 2002072548 A2 20020919, 106 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-US7168 20020308. PRIORITY: US 2001-PV274900 20010309; US 2001-PV343259 20011221.

REFERENCE 6: 136:355158 Preparation of carboxamides as NMDA receptor antagonists. Horvath, Csilla; Farkas, Sandor; Domany, Gyoergy; Borza, Istvan; Bartane Szalai, Gizella; Nagy, Jozsef; Kolok, Sandor (Richter

Searched by: Mary Hale 308-4258 CM-1 1E01

Gedeon Vegyeszeti Gyar Rt., Hung.). PCT Int. Appl. WO 2002034718 A1 20020502, 63 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-HU99 20011015. PRIORITY: HU 2000-200004123 20001024.

REFERENCE 7: 136:308633 Microbial conversion of bicyclic heteroaromatic compounds. Cawley, James J.; Wong, John W. (USA). U.S. Pat. Appl. Publ. US 20020045225 A1 20020418, 14 pp. (English). CODEN: USXXCO. APPLICATION: US 2001-924292 20010808. PRIORITY: US 2000-PV224089 20000809.

REFERENCE 8: 136:294851 Preparation of piperazine (hetero)aryl ketones and sulfones as factor Xa inhibitors for treatment of thrombosis or coagulation disorders. Zhu, Bing-Yan; Jia, Zhaozhong Jon; Zhang, Penglie; Huang, Wenrong; Wu, Yanhong; Zuckett, Jingmei Fan; Goldman, Erik A.; Wang, Lingyan; Song, Yonghong; Scarborough, Robert M. (Cor Therapeutics, Inc., USA). PCT Int. Appl. WO 2002026720 A2 20020404, 128 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-US30315 20011001. PRIORITY: US 2000-PV236161 20000929.

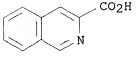
REFERENCE 9: 136:279204 Preparation of heterocyclylcarbonyl derivatives of arylsulfonylhydrazides as branched chain amino acid-dependent aminotransferase inhibitors and their use in the treatment of neurodegenerative diseases. Bora, Keenan Martin; Hu, Lain-Yen; Kesten, Suzanne Ross; Lei, Huanyshu; Moreland, David Winslow; Rafferty, Michael Francis; Ryder, Todd Robert; Scholten, Jeffrey David; Wustrow, David Juergen (Warner-Lambert Company, USA). PCT Int. Appl. WO 2002024672 A2 20020328, 183 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-US25892 20010817. PRIORITY: US 2000-PV233786 20000919.

REFERENCE 10: 136:54020 Preparation of amino acid derivatives as serine protease inhibitors. Liebeschuetz, John Walter; Murray, Christopher William; Young, Stephen Clinton; Camp, Nicholas Paul; Jones, Stuart Donald; Wylie, William Alexander; Masters, John Joseph; Wiley, Michael Robert; Sheehan, Scott Martin; Engel, David Birenbaum; Watson, Brian Morgan; Guzzo, Peter Robert; Mayer, Michael John (Eli Lilly and Company, USA). PCT Int. Appl. WO 2001096323 A1 20011220, 191 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM,

Searched by: Mary Hale 308-4258 CM-1 1E01

HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-GB2553 20010612. PRIORITY: WO 2000-GB2302 20000613; GB 2000-30304 20001213.

L8 ANSWER 16 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **6624-49-3** REGISTRY
CN 3-Isoquinolinecarboxylic acid (6CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 3-Carboxyisoquinoline
CN 3-Isoquinaldic acid
FS 3D CONCORD
MF C10 H7 N O2
CI COM
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CSCHEM, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

56 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
57 REFERENCES IN FILE CAPLUS (1962 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:89815 Preparation of N-acyl-2-heterocyclyl substituted piperidines and analogs as orexin receptor antagonists. Chan, Wai Ngor; Johns, Amanda; Johnson, Christopher Norbert; Novelli, Riccardo; Porter, Roderick Alan (SmithKline Beecham P.L.C., UK). PCT Int. Appl. WO 2003002559 A2 20030109, 81 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-EP7007 20020625. PRIORITY: GB 2001-15862 20010628; GB 2001-30347 20011219.

REFERENCE 2: 138:39193 Preparation of poly-pyrrole substituted isoquinoline compounds having antiinfective activity. Burli, Roland W.; Jones, Peter; Kaizerman, Jacob A.; Hu, Wenhao (Genesoft, Inc., USA). PCT Int. Appl. WO 2002100832 A1 20021219, 88 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,

Searched by: Mary Hale 308-4258 CM-1 1E01

RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-US17954 20020606. PRIORITY: US 2001-PV298206 20010613; US 2001-PV333830 20011127.

REFERENCE 3: 137:370356 Preparation and use of bombesin receptor antagonists for treatment of sexual dysfunction in males and females. Gonzalez, Maria Isabel; Higginbottom, Michael; Stock, Herman Thijs; Pritchard, Martyn Clive; Pinnock, Robert Denham; Van der Graaf, Pieter Hadewijn; Naylor, Alisdair Mark; Wayman, Christopher Peter (UK). U.S. Pat. Appl. Publ. US 2002169101 A1 20021114, 105 pp., Cont.-in-part of U.S. Pat. Appl. 2002 58,606. (English). CODEN: USXXCO. APPLICATION: US 2001-999284 20011115. PRIORITY: US 1999-PV133355 19990510; WO 2000-GB1787 20000510; US 2000-700165 20001109; US 2001-759777 20010112; GB 2001-9910 20010423; GB 2001-11037 20010504.

REFERENCE 4: 137:255221 Heat developable photographic film with specified fog inhibitor and its laser imaging method. Fukusaka, Kiyoshi; Iwamoto, Ryohei; Miura, Norio (Konica Co., Japan). Jpn. Kokai Tokkyo Koho JP 2002268182 A2 20020918, 31 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-70244 20010313.

REFERENCE 5: 137:150215 Cdk4 and/or Cdk6 inhibitors with biaryl ureas and their salts as antitumor agents. Hatayama, Satoshi; Hayashi, Kyoko; Honma, Mitsuki; Takahashi, Ikuko (Banyu Pharmaceutical Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002220338 A2 20020809, 194 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-18755 20010126.

REFERENCE 6: 137:140775 Preparation of piperazinyl and hexahydro-1,4-diazepinyl amino acid derivatives as melanocortin receptor agonists. Backer, Ryan Thomas; Briner, Karin; Collado Cano, Ivan; De Frutos-Garica, Oscar; Doecke, Christopher William; Fisher, Matthew Joseph; Garcia-Paredes, Cristina; Kuklish, Steven Lee; Mancoso, Vincent; Martinelli, Michael John; Mateo Herranz, Ana Isabel; Mullaney, Jeffrey Thomas; Ornstein, Paul Leslie; Wu, Zhipei; Xie, Chaoyu (Eli Lilly and Company, USA). PCT Int. Appl. WO 2002059095 A1 20020801, 554 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-US518 20020123. PRIORITY: US 2001-PV263380 20010123.

REFERENCE 7: 137:93771 Preparation of piperazinocarbonyl(iso)quinolines as 5-HT2A receptor antagonists. Boettcher, Henning; Bartoszyk, Gerd; Harting, Juergen; Van Amsterdam, Christoph; Seyfried, Christoph (Merck Patent G.m.b.H., Germany). Ger. Offen. DE 10102053 A1 20020718, 10 pp. (German). CODEN: GWXXBX. APPLICATION: DE 2001-10102053 20010117.

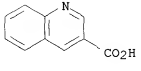
REFERENCE 8: 137:33229 Methods for synthesis of amino-tetrahydroisoquinoline ring compounds. Liu, Song; Rennells, William Martin (USA). U.S. Pat. Appl. Publ. US 2002077480 A1 20020620, 15 pp. (English). CODEN: USXXCO. APPLICATION: US 2001-28227 20011221.

REFERENCE 9: 136:402022 Preparation of (S)-.alpha.-methyltryptophan amide derivatives as bombesin receptor antagonists. Higginbottom, Michael; Pritchard, Martin Clive; Stock, Herman Thijs (Warner-Lambert Company,

USA). PCT Int. Appl. WO 2002040469 A1 20020523, 85 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-EP14401 20011116. PRIORITY: GB 2000-28104 20001117.

REFERENCE 10: 136:395983 Bombesin receptor antagonists, and combinations with other agents, for the treatment of sexual dysfunction. Gonzalez, Maria Isabel; Stock, Herman Thijs; Pinnock, Robert Denham; Pritchard, Martyn Clive; Wayman, Christopher Peter; Van der Graaf, Pieter Hadewijn; Naylor, Alisdair Mark; Higginbottom, Michael (Warner-Lambert Company, USA). PCT Int. Appl. WO 2002040008 A2 20020523, 225 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-GB5018 20011114. PRIORITY: WO 2000-GB4380 20001117; GB 2001-9910 20010423; GB 2001-11037 20010504.

L8 ANSWER 17 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **6480-68-8** REGISTRY
CN 3-Quinolinecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 3-Carboxyquinoline
FS 3D CONCORD
MF C10 H7 N O2
CI COM
LC STN Files: ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, HODOC*, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

200 REFERENCES IN FILE CA (1962 TO DATE)
24 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
200 REFERENCES IN FILE CAPLUS (1962 TO DATE)
10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:122845 Rapid generation of cis-constrained norstatine analogs using a TMSN3-modified Passerini MCC/N-capping strategy. Nixey,

Thomas; Hulme, Christopher (AMGEN, Department of Small Molecule Drug Discovery, Thousand Oaks, CA, 91320, USA). Tetrahedron Letters, 43(38), 6833-6835 (English) 2002. CODEN: TELEAY. ISSN: 0040-4039. Publisher: Elsevier Science Ltd..

REFERENCE 2: 138:89600 Synthesis and SAR of azalide 3,6-ketal aromatic derivatives as potent gram-positive and gram-negative antibacterial agents. Cheng, Hengmiao; Dirlam, John P.; Ziegler, Carl B.; Lundy, Kristin M.; Hayashi, Shigeru F.; Kamicker, Barbara J.; Dutra, Jason K.; Daniel, Kirsten L.; Santoro, Sheryl L.; George, David M.; Bertsche, Camilla D.; Sakya, Subas M.; Suarez-Contreras, Melani (Groton Laboratories, Pfizer Global Research and Development, Groton, CT, 06340, USA). Bioorganic & Medicinal Chemistry Letters, 12(17), 2431-2434 (English) 2002. CODEN: BMCLE8. ISSN: 0960-894X. Publisher: Elsevier Science Ltd..

REFERENCE 3: 137:366225 Transformation of cinoxacin by Beauveria bassiana. Parshikov, Igor A.; Moody, Joanna D.; Heinze, Thomas M.; Freeman, James P.; Williams, Anna J.; Sutherland, John B. (National Center for Toxicological Research, Food and Drug Administration, Jefferson, AR, 72079-9502, USA). FEMS Microbiology Letters, 214(1), 133-136 (English) 2002. CODEN: FMLED7. ISSN: 0378-1097. Publisher: Elsevier Science B.V..

REFERENCE 4: 137:345180 Self-Assembly of Polymer and Sheet Structures in Palladium(II) Complexes Containing Carboxylic Acid Substituents. Qin, Zengquan; Jennings, Michael C.; Puddephatt, Richard J.; Muir, Kenneth W. (Department of Chemistry, University of Western Ontario, London, N6A 5B7, Can.). Inorganic Chemistry, 41(20), 5174-5186 (English) 2002. CODEN: INOCAJ. ISSN: 0020-1669. Publisher: American Chemical Society.

REFERENCE 5: 137:321863 A molybdenum-containing dehydrogenase catalyzing an unusual 2-hydroxylation of nicotinic acid. Schrader, T.; Thiemer, B.; Andreesen, J. R. (Institut fur Mikrobiologie, Martin-Luther-Universitat Halle, Halle, 06099, Germany). Applied Microbiology and Biotechnology, 58(5), 612-617 (English) 2002. CODEN: AMBIDG. ISSN: 0175-7598. Publisher: Springer-Verlag.

REFERENCE 6: 137:257628 Antitumor agents containing novel chroman derivatives. Fujita, Takashi; Wada, Kunio; Oguchi, Minoru; Kurakata, Shinichi (Sankyo Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002275064 A2 20020925, 101 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2002-5560 20020115. PRIORITY: JP 2001-6574 20010115.

REFERENCE 7: 137:232680 Preparation of aryl and heteroaryl urea selective Chk1 inhibitors for use as radiosensitizers and chemosensitizers for treating diseases and conditions related to DNA damage or lesions in DNA replication. Keegan, Kathleen S.; Kesicki, Edward A.; Gaudino, John Joseph; Cook, Adam Wade; Cowen, Scott Douglas; Burgess, Laurence Edward (Icos Corporation, USA). PCT Int. Appl. WO 2002070494 A1 20020912, 236 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-US6452 20020301. PRIORITY: US 2001-PV273124 20010302.

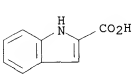
Searched by: Mary Hale 308-4258 CM-1 1E01

REFERENCE 8: 137:226272 A systematic SAR study of C10 modified paclitaxel analogues using a combinatorial approach. Liu, Yanbin; Ali, Syed M.; Boge, Thomas C.; Georg, Gunda I.; Victory, Samuel; Zygmunt, Jan; Marquez, Rebecca T.; Himes, Richard H. (Department of Medicinal Chemistry, and the Drug Discovery Program, Higuchi Biosciences Center, University of Kansas, Lawrence, KS, 66045, USA). Combinatorial Chemistry and High Throughput Screening, 5(1), 39-48 (English) 2002. CODEN: CCHSFU. ISSN: 1386-2073. Publisher: Bentham Science Publishers.

REFERENCE 9: 137:169547 Preparation of 1,4-dioxooctahydropyrrolo[1,2-a]pyrazines as TNF-.alpha. inhibitors for treatment of inflammation. Boyce, Jim P.; Howbert, Jeffry J.; Tabone, John C. (Celltech R & D, Inc., USA). PCT Int. Appl. WO 2002062797 A2 20020815, 60 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-US49576 20011228. PRIORITY: US 2000-PV259359 20001229.

REFERENCE 10: 137:155147 Preparation 6-O-carbamoyl ketolide derivatives of erythromycin useful as antibacterials. Henninger, Todd C.; Xu, Xiaodong (USA). U.S. Pat. Appl. Publ. US 2002115620 Al 20020822, 62 pp., Cont.-in-part of Ser. No. US 2001-773,788. (English). CODEN: USXXCO. APPLICATION: US 2001-11937 20011205. PRIORITY: US 2000-PV251547 20001206; US 2001-773788 20010201.

L8 ANSWER 18 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **1477-50-5** REGISTRY
CN 1H-Indole-2-carboxylic acid (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Indole-2-carboxylic acid (7CI, 8CI)
OTHER NAMES:
CN 2-Carboxyindole
FS 3D CONCORD
MF C9 H7 N O2
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, DDFU, DRUGU, EMBASE, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

574 REFERENCES IN FILE CA (1962 TO DATE)
15 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

Searched by: Mary Hale 308-4258 CM-1 1E01

578 REFERENCES IN FILE CAPLUS (1962 TO DATE)
9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:204856 CC-1065 Analogues Bearing Different DNA-Binding Subunits: Synthesis, Antitumor Activity, and Preliminary Toxicity Study. Wang, Yuqiang; Li, Lianfa; Ye, Wenqing; Tian, Zhiming; Jiang, Wei; Wang, Hong; Wright, Susan C.; Larrick, James W. (Panorama Research Inc., Mountain View, CA, 94043, USA). Journal of Medicinal Chemistry, 46(4), 634-637 (English) 2003. CODEN: JMCMAR. ISSN: 0022-2623. Publisher: American Chemical Society.

REFERENCE 2: 138:170073 Preparation of N-[2-[3-[(4-aminomethyl)phenyl]propylamino]ethyl]amides as human .beta.-tryptase inhibitors for treatment of respiratory diseases, allergic diseases, inflammatory intestinal diseases, hyperprolliferative skin diseases, vascular edema, and rheumatoid arthritis. Kato, Yutaka; Miyazaki, Yutaka; Shimada, Hiroyasu; Manabe, Tadashi; Shiromizu, Ikuya; Okamoto, Atsushi (Mochida Pharmaceutical Co., Ltd., Japan). PCT Int. Appl. WO 2003011812 A1 20030213, 189 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (Japanese). CODEN: PIXXD2. APPLICATION: WO 2002-JP7843 20020801. PRIORITY: JP 2001-233818 20010801.

REFERENCE 3: 138:170036 Synthesis of enynoindoles via vinyl and ethynyl indoles. Perez-Serrano, Leticia; Casarrubios, Luis; Dominguez, Gema; Gonzalez-Perez, Patxi; Perez-Castells, Javier (Departamento de Quimica, Facultad de CC, Experimentales y de la Salud, Universidad San Pablo-CEU, Madrid, 28668, Spain). Synthesis (13), 1810-1812 (English) 2002. CODEN: SYNTBF. ISSN: 0039-7881. Publisher: Georg Thieme Verlag.

REFERENCE 4: 138:153555 Preparation of piperidinyl piperazine and piperidine derivatives as thrombolytic agents. Wiley, Michael Robert; Liebeschuetz, John Walter; Sall, Daniel Jon (Eli Lilly and Company, USA). PCT Int. Appl. WO 2003010160 A2 20030206, 63 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-US21292 20020724. PRIORITY: US 2001-PV307634 20010726; US 2001-PV311462 20010813; US 2001-PV339317 20011212.

REFERENCE 5: 138:122449 Carbopalladation of Nitriles: Synthesis of 2,3-Diarylindenones and Polycyclic Aromatic Ketones by the Pd-Catalyzed Annulation of Alkynes and Bicyclic Alkenes by 2-Iodoarenenitriles. Pletnev, Alexandre A.; Tian, Qingping; Larock, Richard C. (Department of Chemistry, Iowa State University, Ames, IA, 50011, USA). Journal of Organic Chemistry, 67(26), 9276-9287 (English) 2002. CODEN: JOCEAH. ISSN: 0022-3263. Publisher: American Chemical Society.

REFERENCE 6: 138:89600 Synthesis and SAR of azalide 3,6-ketal aromatic

Searched by: Mary Hale 308-4258 CM-1 1E01

derivatives as potent gram-positive and gram-negative antibacterial agents. Cheng, Hengmiao; Dirlam, John P.; Ziegler, Carl B.; Lundy, Kristin M.; Hayashi, Shigeru F.; Kamicker, Barbara J.; Dutra, Jason K.; Daniel, Kirsten L.; Santoro, Sheryl L.; George, David M.; Bertsche, Camilla D.; Sakya, Subas M.; Suarez-Contreras, Melani (Groton Laboratories, Pfizer Global Research and Development, Groton, CT, 06340, USA). Bioorganic & Medicinal Chemistry Letters, 12(17), 2431-2434 (English) 2002. CODEN: BMCLE8. ISSN: 0960-894X. Publisher: Elsevier Science Ltd..

REFERENCE 7: 138:55742 Preparation of diamines and their use as chemokine receptor CXCR4 antagonists, anti-HIV, anti-AIDS, and antitumor agents. Kamiyama, Keiji; Kanzaki, Naoyuki; Hasuoka, Atsushi; Mochizuki, Manabu; Kawamoto, Tetsuji (Takeda Chemical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002371042 A2 20021226, 84 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-177827 20010612.

REFERENCE 8: 138:39451 A multidetachable sulfamate linker successfully used in a solid-phase strategy to generate libraries of sulfamate and phenol derivatives. Poirier, Donald; Ciobanu, Liviu C.; Berube, Marie (Centre Hospitalier Universitaire de Quebec (CHUQ), Pavillon CHUL, Oncology and Molecular Endocrinology Research Center, Medicinal Chemistry Division, Laval University, Quebec, QC, G1V 4G2, Can.). Bioorganic & Medicinal Chemistry Letters, 12(20), 2833-2838 (English) 2002. CODEN: BMCLE8. ISSN: 0960-894X. Publisher: Elsevier Science Ltd..

REFERENCE 9: 138:24435 Correlation of the proton affinity and atomic charges with the constant of dissociation of some indoles. Andonovski, Blagoja S.; Bogdanov, Bogdan T.; Stojkovic, Goran M. (Institute of Chenmistry, Faculty of Natural Sciences and Math., "Sv. Kiril and Metodij" University, Skopje, MK-1001, Macedonia). Glasnik na Hemicarite i Tehnolozite na Makedonija, 21(1), 39-42 (English) 2002. CODEN: GHTMDD. ISSN: 0350-0136. Publisher: Sojuz na Hemicarite i Tehnolozite na Makedonija.

REFERENCE 10: 138:4614 Preparation of piperazinylquinolines and piperazinylquinolones as inhibitors of macrophage migration inhibitory factor. Gaeta, Federico Ca; Baird, Andrew; Anchin, Jerry; Ying, Wenbin; Florkiewicz, Robert; Sircar, Jagadish; Kumar, Kc Sunil (Avanir Pharmaceuticals, USA; Gaeta, Federico C.A.; Kumar K.C., Sunil). PCT Int. Appl. WO 2002094203 A2 20021128, 232 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-US16963 20020524. PRIORITY: US 2001-PV293642 20010524.

L8 ANSWER 19 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **1310-73-2** REGISTRY
CN Sodium hydroxide (Na(OH)) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Sodium hydroxide (8CI)
OTHER NAMES:
CN Aetznatron
CN Ascarite
CN Caustic soda
CN Collo-Grillrein

Searched by: Mary Hale 308-4258 CM-1 1E01

CN Collo-Tapetta
CN GR
CN GR (alkali reagent)
CN Soda, caustic
CN White caustic
DR 8012-01-9
MF H Na O
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

Na—OH

63640 REFERENCES IN FILE CA (1962 TO DATE)
392 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
63735 REFERENCES IN FILE CAPLUS (1962 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:214611 Gas sensor and method of manufacturing the same. Jain, Kailash C.; Wang, Da Yu; Detwiler, Eric J.; Kikuchi, Paul (USA). U.S. Pat. Appl. Publ. US 2003047452 A1 20030313, 16 pp. (English). CODEN: USXXCO. APPLICATION: US 2001-949591 20010910.

REFERENCE 2: 138:213854 Nonaqueous electrolytes and double-layer capacitors and manufacturing capacitors using electrolytes thereof. Sato, Takaya; Hata, Kimiyo (Nisshin Spinning Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2003059775 A2 20030228, 15 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-243754 20010810.

REFERENCE 3: 138:213615 Method and apparatus for chemical-mechanical jet etching of Si, GaAs, glass and other semiconductor structures. Bachrach, Robert Z.; Chinn, Jeffrey D. (USA). U.S. Pat. Appl. Publ. US 2003038110 A1 20030227, 9 pp. (English). CODEN: USXXCO. APPLICATION: US 2001-932396 20010817.

REFERENCE 4: 138:212021 Thallium antimony sulfide and thallium bismuth sulfide thin films produced by heating chemically deposited multi-layers. Estrella, Veronica; Nair, M. T. S.; Nair, P. K. (Department of Solar Energy Materials, Centro de Investigacion en Energia, Universidad Nacional Autonoma de Mexico, Morelos, 62580, Mex.). Semiconductor Science and Technology, 17(11), 1198-1204 (English) 2002. CODEN: SSTEET. ISSN: 0268-1242. Publisher: Institute of Physics Publishing.

REFERENCE 5: 138:211899 Magnesium anodization system and methods. Mawston, Ian Grant (Magnesium Technology Limited, N. Z.). PCT Int. Appl. WO 2003016596 A1 20030227, 23 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ,

Searched by: Mary Hale 308-4258 CM-1 1E01

UA, UG, US, UZ, VC, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-NZ156 20020814. PRIORITY: NZ 2001-512701 20010814.

REFERENCE 6: 138:211879 Electrochemical corrosion behavior of component phases of NdFeB magnet. Xie, Faqin; Gao, Tao; Zou, Guangrong (Civil Aviation Eng. College, Northwestern Polytechnical Univ., Xi'an, 710072, Peop. Rep. China). Fushi Kexue Yu Fanghu Jishu, 14(5), 260-262 (Chinese) 2002. CODEN: FKFJED. ISSN: 1002-6495. Publisher: Fushi Kexue Yu Fanghu Jishu Bianjibu.

REFERENCE 7: 138:211863 Cathode potential drop in a glow discharge with an electrolyte cathode and effective coefficient of electron emission from a solution. Khlyustova, A. V.; Maksimov, A. I. (Inst. Khim. Rastvorov, RAN, Ivanovo, 153045, Russia). Elektronnaya Obrabotka Materialov (5), 35-40 (Russian) 2002. CODEN: EOBMAF. ISSN: 0013-5739. Publisher: Institut Prikladnoi Fiziki AN Respubliki Moldova.

REFERENCE 8: 138:211759 A wide energy range personnel neutron dosimeter. Izerrouken, M.; Skvarc, J.; Ilic, R. (Centre de Recherche Nucleaire de Draria, Algiers, Algeria). Radiation Measurements, 37(1), 21-24 (English) 2003. CODEN: RMEAEP. ISSN: 1350-4487. Publisher: Elsevier Science Ltd..

REFERENCE 9: 138:210936 Calculation of individual isotope equilibrium constants for implementation in geochemical models. Thorstenson, Donald C.; Parkhurst, David L. (Branch of Regional Res., U.S.Geological Survey, Denver, CO, 80225, USA). Water-Resources Investigations Report (United States Geological Survey), 02-4172, i-iii,1-129 (English) 2002. CODEN: WIREFS.

REFERENCE 10: 138:210801 Size-Selective Chemical Synthesis of Tartrate Stabilized Cobalt Ferrite Ionic Magnetic Fluid. Neveu, S.; Bee, A.; Robineau, M.; Talbot, D. (Laboratoire L.I.2.C. Colloides Inorganiques, UMR CNRS 7612, Universite Pierre et Marie Curie, Paris, 75252, Fr.). Journal of Colloid and Interface Science, 255(2), 293-298 (English) 2002. CODEN: JCISA5. ISSN: 0021-9797. Publisher: Elsevier Science.

L8 ANSWER 20 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **1310-58-3** REGISTRY
CN Potassium hydroxide (K(OH)) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Potassium hydroxide (8CI)
OTHER NAMES:
CN Caustic potash
CN Cyantek CC 723
CN Potash
DR 71769-53-4, 29857-72-5
MF H K O
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**

Searched by: Mary Hale 308-4258 CM-1 1E01

(**Enter CHEMLIST File for up-to-date regulatory information)

K- OH

26067 REFERENCES IN FILE CA (1962 TO DATE)
183 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
26131 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:214676 Alkalimetric determination of tridecanoic acid using oil-in-water emulsions solubilized by sodium dodecylsulfate. Kulichenko, S. A.; Shevchenko, A. M. (Kiev. Nats. Univ. im. Tarasa Shevchenko, Kiev, Ukraine). Ukrainskii Khimicheskii Zhurnal (Russian Edition), 68(7-8), 103-106 (Russian) 2002. CODEN: UKZHAU. ISSN: 0041-6045. Publisher: Institut Obshchei i Neorganicheskoi Khimii im. V. I. Vernadskogo NAN Ukrainy.

REFERENCE 2: 138:214611 Gas sensor and method of manufacturing the same. Jain, Kailash C.; Wang, Da Yu; Detwiler, Eric J.; Kikuchi, Paul (USA). U.S. Pat. Appl. Publ. US 2003047452 A1 20030313, 16 pp. (English). CODEN: USXXCO. APPLICATION: US 2001-949591 20010910.

REFERENCE 3: 138:213886 Process for producing an electric double layer capacitor and positive electrode for an electric double layer capacitor. Shinozaki, Yasuo; Yoshida, Naoki; Hiratsuka, Kazuya (Asahi Glass Company, Limited, Japan). U.S. Pat. Appl. Publ. US 2003048594 A1 20030313, 6 pp. (English). CODEN: USXXCO. APPLICATION: US 2002-226135 20020823. PRIORITY: JP 2001-253267 20010823.

REFERENCE 4: 138:213855 Refinement of amorphous niobium oxide dielectric films and manufacture of niobium solid-electrolytic capacitors. Shimizu, Kunihiko; Yoshida, Katsuhiro (NEC Tokin Corp., Japan). Jpn. Kokai Tokkyo Koho JP 2003059777 A2 20030228, 13 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-247673 20010817.

REFERENCE 5: 138:213832 Electroplating and electroless plating of metal in the manufacture of programmable RAM devices. Klein, Rita J. (USA). U.S. Pat. Appl. Publ. US 2003052330 A1 20030320, 21 pp. (English). CODEN: USXXCO. APPLICATION: US 2001-956783 20010920.

REFERENCE 6: 138:213615 Method and apparatus for chemical-mechanical jet etching of Si, GaAs, glass and other semiconductor structures. Bachrach, Robert Z.; Chinn, Jeffrey D. (USA). U.S. Pat. Appl. Publ. US 2003038110 A1 20030227, 9 pp. (English). CODEN: USXXCO. APPLICATION: US 2001-932396 20010817.

REFERENCE 7: 138:213326 Method of electrochemically etching diaphragm for CMOS integrated pressure sensor. Sooriakumar, K.; Tucker, Bob; Ray, Cindy (USA). IP.com Journal, 2(7), 95 (No. IPCOM000008452D) (English) 14 Jun 2002. IP 8452D 20020614. CODEN: IJPOBX. ISSN: 1533-0001. PRIORITY: IP 2002-8452D 20020614. Publisher: IP.com, Inc..

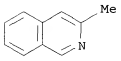
REFERENCE 8: 138:212685 Method to remove Mo/Si multilayers without damaging starting substrate. Mangat, Pawitter J. S.; Talin, A. Alec (USA). IP.com Journal, 2(6), 209 (No. IPCOM000008275D) (English) 31 May 2002. IP 8275D 20020531. CODEN: IJPOBX. ISSN: 1533-0001. PRIORITY: IP 2002-8275D 20020531. Publisher: IP.com, Inc..

REFERENCE 9: 138:210871 Kinetics of the reaction of CO2 and OH- ions at

infinite dilution. Kucka, Lars; Richter, Joachim; Kenig, Eugeny Y.; Gorak, Andrzej (Germany). Chemie Ingenieur Technik, 75(1-2), 90-94 (German) 2003. CODEN: CITEAH. ISSN: 0009-286X. Publisher: Wiley-VCH Verlag GmbH & Co. KGaA.

REFERENCE 10: 138:210654 Water structure and electron trapping in aqueous ionic solutions. Wolszczak, M.; Wypych, M.; Tomczyk, M.; Kroh, J. (Institute of Applied Radiation Chemistry, Technical University of Lodz, Lodz, 93-590, Pol.). Research on Chemical Intermediates, 28(6), 537-549 (English) 2002. CODEN: RCINEE. ISSN: 0922-6168. Publisher: VSP BV.

L8 ANSWER 21 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **1125-80-0** REGISTRY
CN Isoquinoline, 3-methyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 3-Methylisoquinoline
FS 3D CONCORD
MF C10 H9 N
CI COM
LC STN Files: ANABSTR, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, DETHERM*, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, NIOSHTIC, RTECS*, SPECINFO, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

218 REFERENCES IN FILE CA (1962 TO DATE)
218 REFERENCES IN FILE CAPLUS (1962 TO DATE)
32 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:197713 Copper(II) salicylideneglycinate complexes as potential antimicrobial agents. Valent, Aladar; Melnik, Milan; Hudecova, Daniela; Dudova, Barbora; Kivekas, Raikko; Sundberg, Markku R. (Faculty of Pharmacy, Department of Chemical Theory of Drugs, Comenius University, Bratislava, 83232, Slovakia). Inorganica Chimica Acta, 340, 15-20 (English) 2002. CODEN: ICHAA3. ISSN: 0020-1693. Publisher: Elsevier Science B.V..

REFERENCE 2: 137:262728 1H chemical shifts in NMR. Part 18.1 Ring currents and .pi.-electron effects in hetero-aromatics. Abraham, Raymond J.; Reid, Matthew (Chemistry Department, The University of Liverpool, Liverpool, L69 3BX, UK). Journal of the Chemical Society, Perkin Transactions 2 (6), 1081-1091 (English) 2002. CODEN: JCSPGI. ISSN: 1472-779X. Publisher: Royal Society of Chemistry.

REFERENCE 3: 137:32104 Biocatalytic oxidation of 2-methylquinoxaline to 2-quinoxalinecarboxylic acid. Wong, John W.; Watson, Harry A., Jr.; Bouressa, James F.; Burns, Michael P.; Cawley, James J.; Doro, Albert E.; Guzek, Donald B.; Hintz, Michael A.; McCormick, Ellen L.; Scully, Douglas A.; Siderewicz, Joseph M.; Taylor, William J.; Truesdell, Susan J.; Wax,

Searched by: Mary Hale 308-4258 CM-1 1E01

Richard G. (Bioprocess Research and Development, Pfizer Global Research and Development, Groton, CT, 06340, USA). Organic Process Research & Development, 6(4), 477-481 (English) 2002. CODEN: OPRDFK. ISSN: 1083-6160. Publisher: American Chemical Society.

REFERENCE 4: 136:401426 Sorption-structure correlations of heterocyclic nitrogen compounds in liquid chromatography. Dmitrikov, V. P.; Nabivach, V. M. (Dneprodzerzhinsk. Tekh. Univ., Dneprodzerzhinsk, Ukraine). Koks i Khimiya (1), 22-25 (Russian) 2002. CODEN: KOKKAI. ISSN: 0023-2815. Publisher: Metallurgizdat.

REFERENCE 5: 136:308633 Microbial conversion of bicyclic heteroaromatic compounds. Cawley, James J.; Wong, John W. (USA). U.S. Pat. Appl. Publ. US 20020045225 A1 20020418, 14 pp. (English). CODEN: USXXCO. APPLICATION: US 2001-924292 20010808. PRIORITY: US 2000-PV224089 20000809.

REFERENCE 6: 136:240598 Diferrocenyltriphosphines 2. Reversible phosphine deligation in the chemistry of diferrocenyltriphosphine Ru(II) dichloride complexes with nitriles and pyridines: towards a pH-switchable catalyst?. Butler, Ian R.; Coles, Simon J.; Fontani, Marco; Hursthouse, Michael B.; Lewis, Eric; Malik, K. L. M. Abdul; Meunier, Marc; Zanello, Piero (Department of Chemistry, University of Wales, Bangor, Gwynedd, LL57 2UW, UK). Journal of Organometallic Chemistry, 637-639, 538-548 (English) 2001. CODEN: JORCAI. ISSN: 0022-328X. Publisher: Elsevier Science S.A..

REFERENCE 7: 136:53764 Synthesis and activity of heteroaryl compounds as inhibitors of platelet derived growth factor related disorders such as cancers. Hirth, Klaus P.; Mann, Elaina; Shawyer, Laura K.; Ullrich, Axel; Szekely, Istvan; Bajor, Tamas; Haimichael, Janis; Orfi, Laszlo; Levitzki, Alex; Gazit, Aviv; Tang, Peng Cho; Lammers, Reiner (University of California, USA; Yissum Research Development Company of the Hebrew University of Jerusalem; Biosignal Ltd.; Sugen, Inc.; Max-Planck-Gesellschaft zur Forderung der Wissenschaften e.V.). U.S. US 6331555 B1 20011218, 81 pp., Cont. of U. S. Ser. 456,957, abandoned. (English). CODEN: USXXAM. APPLICATION: US 1999-363237 19990727. PRIORITY: US 1995-456957 19950601.

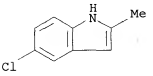
REFERENCE 8: 136:37527 Method for stereoselective preparation of 1-acyl-2-cyano-1,2-dihydroquinoline derivatives and 2-acyl-1-cyano-1,2-dihydroisoquinoline derivatives. Shibasaki, Masakatsu; Takamura, Masahiro; Kanai, Motomu; Funabashi, Tadashi (Sumitomo Pharmaceuticals Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2001348383 A2 20011218, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2000-168805 20000606.

REFERENCE 9: 135:195486 Catalytic enantioselective Reissert-type reaction: development and application to the synthesis of a potent NMDA receptor antagonist (-)-L-689,560 using a solid-supported catalyst. Takamura, Masahiro; Funabashi, Ken; Kanai, Motomu; Shibasaki, Masakatsu (Graduate School of Pharmaceutical Sciences, The University of Tokyo, Bunkyo-ku Tokyo, 113-0033, Japan). Journal of the American Chemical Society, 123(28), 6801-6808 (English) 2001. CODEN: JACSAT. ISSN: 0002-7863. Publisher: American Chemical Society.

REFERENCE 10: 135:180359 Indium metal as a reducing agent in organic synthesis. Pitts, Michael R.; Harrison, Justin R.; Moody, Christopher J. (Department of Chemistry, University of Exeter, Exeter, EX4 4QD, UK). Journal of the Chemical Society, Perkin Transactions 1 (9), 955-977 (English) 2001. CODEN: JCSPCE. ISSN: 1472-7781. Publisher: Royal Society of Chemistry.

Searched by: Mary Hale 308-4258 CM-1 1E01

L8 ANSWER 22 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **1075-35-0** REGISTRY
CN 1H-Indole, 5-chloro-2-methyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Indole, 5-chloro-2-methyl- (6CI, 7CI, 8CI)
OTHER NAMES:
CN 2-Methyl-5-chloroindole
CN 5-Chloro-2-methyl-1H-indole
CN 5-Chloro-2-methylindole
FS 3D CONCORD
MF C9 H8 Cl N
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, HODOC*, IFICDB, IFIPAT, IFIUDB, SPECINFO, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

45 REFERENCES IN FILE CA (1962 TO DATE)
45 REFERENCES IN FILE CAPLUS (1962 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:106601 Preparation of substituted anilinic piperidines as MCH selective antagonists. Marzabadi, Mohammad R.; Wetzel, John; Deleon, John E.; Jiang, Yu (Synaptic Pharmaceutical Corporation, USA). PCT Int. Appl. WO 2003004027 A1 20030116, 771 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-US21063 20020703. PRIORITY: US 2001-899794 20010705; US 2002-42582 20020109.

REFERENCE 2: 138:73145 Synthesis of 2,5-Dihydroxy-3-(indol-3-yl)benzoquinones by Acid-Catalyzed Condensation of Indoles with 2,5-Dichlorobenzoquinone. Pirrung, Michael C.; Deng, Liu; Li, Zhitao; Park, Kaapjoo (Department of Chemistry Levine Science Research Center, Duke University, Durham, NC, 27708-0317, USA). Journal of Organic Chemistry, 67(24), 8374-8388 (English) 2002. CODEN: JOCEAH. ISSN: 0022-3263. Publisher: American Chemical Society.

REFERENCE 3: 138:55866 Preparation of indole derivatives as phospholipase enzyme inhibitors for treatment of inflammatory conditions. Seehra, Jasbir S.; McKew, John C.; Lovering, Frank; Bemis, Jean E.; Xiang, Yibin; Chen, Lihren; Knopf, John L. (Genetics Institute, LLC, USA). U.S. US

Searched by: Mary Hale 308-4258 CM-1 1E01

6500853 B1 20021231, 57 pp., Cont.-in-part of U. S. Ser. No. 256,062, abandoned. (English). CODEN: USXXAM. APPLICATION: US 2000-686616 20001011. PRIORITY: US 1998-PV113674 19980228; US 1999-256062 19990224.

REFERENCE 4: 137:33321 Preparation of indazolyl-substituted pyrroline compounds as kinase inhibitors for treating or ameliorating kinase-mediated disorders. Zhang, Han-Cheng; Maryanoff, Bruce; Conway, Bruce; White, Kimberly; Ye, Hong; Hecker, Leonard R.; McComsey, David F. (Ortho-McNeil Pharmaceutical, Inc., USA). PCT Int. Appl. WO 2002046183 A2 20020613, 148 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-US47689 20011206. PRIORITY: US 2000-PV254166 20001208.

REFERENCE 5: 136:308633 Microbial conversion of bicyclic heteroaromatic compounds. Cawley, James J.; Wong, John W. (USA). U.S. Pat. Appl. Publ. US 20020045225 A1 20020418, 14 pp. (English). CODEN: USXXCO. APPLICATION: US 2001-924292 20010808. PRIORITY: US 2000-PV224089 20000809.

REFERENCE 6: 136:247577 Preparation of 3-phenyl-4,5,6,7-tetrahydropyrazolo[4,3-c]pyridines as cathepsin S inhibitors for treating allergies. Cai, Hui; Edwards, James P.; Gu, Yin; Karlsson, Lars; Meduna, Steven P.; Pio, Barbara A.; Sun, Siquan; Thurmond, Robin L.; Wei, Jianmei (Ortho McNeil Pharmaceutical, Inc., USA). PCT Int. Appl. WO 2002020013 A2 20020314, 115 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-US27480 20010905. PRIORITY: US 2000-PV230407 20000906; US 2001-927188 20010810.

REFERENCE 7: 136:200183 Substituted and/or fused pyrazoles, particularly indolylpiperidinylpropyl-substituted pyrazolopyridines, useful as cathepsin S inhibitors, and their pharmaceutical compositions and use as immunosuppressants. Cai, Hui; Edwards, James P.; Meduna, Steven P.; Pio, Barbara A.; Wei, Jianmei (Ortho McNeil Pharmaceutical, Inc., USA). PCT Int. Appl. WO 2002014317 A2 20020221, 119 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-US25180 20010810. PRIORITY: US 2000-PV225178 20000814; US 2001-927188 20010810.

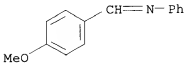
REFERENCE 8: 135:303820 Efficient synthesis of 3-(4,5-dihydro-1H-imidazol-2-yl)-1H-indoles. Hary, U.; Roettig, U.; Paal, M. (Lilly Forschung GmbH, a

Division of Eli Lilly Research Laboratories, Hamburg, 22419, Germany). Tetrahedron Letters, 42(31), 5187-5189 (English) 2001. CODEN: TELEAY. ISSN: 0040-4039. Publisher: Elsevier Science Ltd..

REFERENCE 9: 135:92503 Ruthenium-catalyzed heteroannulation of anilines with alkanolammonium chlorides leading to indoles. Cho, C. S.; Kim, J. H.; Kim, T.-J.; Shim, S. C. (College of Engineering, Department of Industrial Chemistry, Kyungpook National University, Taegu, 702-701, S. Korea). Tetrahedron, 57(16), 3321-3329 (English) 2001. CODEN: TETRAB. ISSN: 0040-4020. Publisher: Elsevier Science Ltd..

REFERENCE 10: 134:207677 Synthesis of 3-indolyl-2,5-dihydroxybenzoquinones. Pirrung, Michael C.; Park, Kaapjoo; Li, Zhitao (Department of Chemistry Levine Science Research Center, Duke University, Durham, NC, 27708, USA). Organic Letters, 3(3), 365-367 (English) 2001. CODEN: ORLEF7. ISSN: 1523-7060. Publisher: American Chemical Society.

L8 ANSWER 23 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **836-41-9** REGISTRY
CN Benzenamine, N-[(4-methoxyphenyl)methylene]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Aniline, N-(p-methoxybenzylidene)- (6CI, 7CI, 8CI)
OTHER NAMES:
CN (4-Methoxybenzylidene)aniline
CN (4-Methoxybenzylidene)phenylamine
CN (4-Methoxyphenylmethylene)(phenyl)amine
CN (p-Methoxybenzylidene)aniline
CN N-(4-Methoxybenzylidene)aniline
CN N-(p-Methoxybenzylidene)aniline
CN p-Methoxybenzalaniline
CN p-Methoxybenzaldehyde anil
FS 3D CONCORD
MF C14 H13 N O
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, SPECINFO, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

489 REFERENCES IN FILE CA (1962 TO DATE)
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
490 REFERENCES IN FILE CAPLUS (1962 TO DATE)
17 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:169847 A convenient synthetic access to .delta.-amino-.gamma.,.gamma.-difluoro-.beta.-ketoesters. Wang, Yanli; Zhu, Shizheng (Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, 200032, Peop. Rep. China). Synthesis (13), 1813-1818

Searched by: Mary Hale 308-4258 CM-1 1E01

(English) 2002. CODEN: SYNTBF. ISSN: 0039-7881. Publisher: Georg Thieme Verlag.

REFERENCE 2: 138:153565 Saccharide-accelerated hydrolysis of boronic acid imines. Hartley, James H.; Phillips, Marcus D.; James, Tony D. (Department of Chemistry, University of Bath, Bath, BA2 7AY, UK). New Journal of Chemistry, 26(9), 1228-1237 (English) 2002. CODEN: NJCHE5. ISSN: 1144-0546. Publisher: Royal Society of Chemistry.

REFERENCE 3: 138:137057 Selective synthesis of .beta.-amino esters and .beta.-lactams by rhodium-catalyzed Reformatsky-type reaction. Kanai, Kazuo; Wakabayashi, Hitoshi; Honda, Toshio (Fac. Pharmaceutical Sci., Hoshi Univ., Ebara 2-4-41, Shinagawa-ku, Tokyo, 142-8501, Japan). Heterocycles, 58, 47-51 (English) 2002. CODEN: HTCYAM. ISSN: 0385-5414. Publisher: Japan Institute of Heterocyclic Chemistry.

REFERENCE 4: 138:97218 Electrochemical investigation of benzylideneaniline and substituted benzylideneaniline Schiff's bases at glassy carbon electrode. Murali, S. R.; Swamy, B. E. Kumara; Sherigara, B. S.; Kallurayya, Balakrishna (Department of Post-Graduate Studies in Industrial Chemistry, Kuvempu University, Karnataka, 577 451, India). Bulletin of Electrochemistry, 18(9), 385-390 (English) 2002. CODEN: BUELE6. ISSN: 0256-1654. Publisher: Central Electrochemical Research Institute.

REFERENCE 5: 138:24565 Solid-Phase Synthesis of Monocyclic .beta.-Lactam Derivatives. Schunk, S.; Enders, D. (Institut fuer Organische Chemie, Rheinisch-Westfaelische Technische Hochschule, Aachen, 52074, Germany). Journal of Organic Chemistry, 67(23), 8034-8042 (English) 2002. CODEN: JOCEAH. ISSN: 0022-3263. Publisher: American Chemical Society.

REFERENCE 6: 137:384610 Bronsted acid-catalyzed Mannich-type reactions in aqueous media. Akiyama, Takahiko; Takaya, Jun; Kagoshima, Hirotaka (Department of Chemistry, Faculty of Science, Gakushuin University, Tokyo, 171-8588, Japan). Advanced Synthesis & Catalysis, 344(3+4), 338-347 (English) 2002. CODEN: ASCAF7. ISSN: 1615-4150. Publisher: Wiley-VCH Verlag GmbH.

REFERENCE 7: 137:337762 Acid-Free Aza-Diels-Alder Reaction of Danishefsky's Diene with Imines. Yuan, Yu; Li, Xin; Ding, Kuiling (State Key Laboratory of Organometallic Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, 200032, Peop. Rep. China). Organic Letters, 4(19), 3309-3311 (English) 2002. CODEN: ORLEF7. ISSN: 1523-7060. Publisher: American Chemical Society.

REFERENCE 8: 137:325135 NbCl5: a novel Lewis acid in allylation reactions. Andrade, Carlos Kleber Z.; Azevedo, Neucirio R.; Oliveira, Guilherme R. (Instituto de Quimica, Universidade de Brasilia, Brasilia, 70910-970, Brazil). Synthesis (7), 928-936 (English) 2002. CODEN: SYNTBF. ISSN: 0039-7881. Publisher: Georg Thieme Verlag.

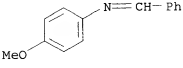
REFERENCE 9: 137:247565 Synthesis of azetidin-2-one via in situ generated acid chlorides using hexachloroacetone-triethylphosphite. Arun, M.; Govande, V. V.; Deshmukh, A. R. A. S.; Bhawal, B. M. (Division of Organic Chemistry (Synthesis), National Chemical Laboratory, Pune, 411 008, India). Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry, 41B(4), 856-857 (English) 2002. CODEN: IJSBDB. ISSN: 0376-4699. Publisher: National Institute of Science Communication.

REFERENCE 10: 137:169469 Reactions of unsymmetrical .alpha.-diazo-.beta.-

Searched by: Mary Hale 308-4258 CM-1 1E01

diketones with imines: Syntheses of 4H-1,3-oxazin-4-ones. Xu, Jiaxi; Chen, Liangbi (College of Chemistry and Molecular Engineering, Peking University, Beijing, 100871, Peop. Rep. China). Heteroatom Chemistry, 13(2), 165-168 (English) 2002. CODEN: HETCE8. ISSN: 1042-7163. Publisher: John Wiley & Sons, Inc..

L8 ANSWER 24 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **783-08-4** REGISTRY
CN Benzenamine, 4-methoxy-N-(phenylmethylene)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN p-Anisidine, N-benzylidene- (6CI, 7CI, 8CI)
OTHER NAMES:
CN 4-Methoxy-N-(phenylmethylene)benzenamine
CN 4-Methoxy-N-benzylideneaniline
CN Benzaldehyde p-anisidine imine
CN Benzylidene-4-methoxyaniline
CN Benzylidene-p-methoxyaniline
CN Benzylidene-p-methoxyphenylamine
CN N-(4-Methoxyphenyl)benzaldimine
CN N-(4-Methoxyphenyl)benzylideneimine
CN N-(p-Methoxyphenyl)benzenemethanimine
CN N-Benzylidene-4-methoxyaniline
CN N-Benzylidene-p-anisidine
CN N-Benzylidene-p-methoxyaniline
FS 3D CONCORD
MF C14 H13 N O
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, IFICDB, IFIPAT, IFIUDB, SPECINFO, SYNTHLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

533 REFERENCES IN FILE CA (1962 TO DATE)
534 REFERENCES IN FILE CAPLUS (1962 TO DATE)
22 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:170009 Attempted synthesis of 2-azetidinones via ester enolate condensation reactions with imines and thioimidates. Sharma, S. D.; Saluja, Aarti; Bhaduri, Susmita; Kanwar, Seema (Department of Chemistry, Panjab University, Chandigarh, 160 014, India). Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry, 41B(9), 1964-1969 (English) 2002. CODEN: IJSBDB. ISSN: 0376-4699. Publisher: National Institute of Science Communication.

REFERENCE 2: 138:169922 Participation of self-generated polyaniline support in copper(II) catalysed oxidative reaction of phenyl aldimines. Handique, Jyotirekha G.; Borah, Lukumoni; Sarma, Rupam Jyoti; Baruah, Jubaraj B. (Department of Chemistry, Indian Institute of Technology, Assam, Guwahati, 781 039, India). Journal of Molecular Catalysis A: Chemical, 188(1-2), 63-69 (English) 2002. CODEN: JMCCF2. ISSN: 1381-1169. Publisher:

Searched by: Mary Hale 308-4258 CM-1 1E01

Elsevier Science B.V..

REFERENCE 3: 138:153565 Saccharide-accelerated hydrolysis of boronic acid imines. Hartley, James H.; Phillips, Marcus D.; James, Tony D. (Department of Chemistry, University of Bath, Bath, BA2 7AY, UK). New Journal of Chemistry, 26(9), 1228-1237 (English) 2002. CODEN: NJCHE5. ISSN: 1144-0546. Publisher: Royal Society of Chemistry.

REFERENCE 4: 138:153290 Use of .alpha.-allyloxy-.alpha.-trimethylsiloxyacetate for reductive imino aldol reaction promoted by titanium tetraiodide: a rapid access to .beta.-amino-.alpha.-hydroxy esters. Shimizu, Makoto; Sahara, Tetsuya (Department of Chemistry for Materials, Mie University, Mie, 514-8507, Japan). Chemistry Letters (9), 888-889 (English) 2002. CODEN: CMLTAG. ISSN: 0366-7022. Publisher: Chemical Society of Japan.

REFERENCE 5: 138:153261 Crossed pinacol coupling reaction between aldehydes and imines: a rapid access to 1,2-amino alcohols. Shimizu, Makoto; Iwata, Atsushi; Makino, Hiroaki (Department of Chemistry for Materials, Mie University, Mie, 514-8507, Japan). Synlett (9), 1538-1540 (English) 2002. CODEN: SYNLES. ISSN: 0936-5214. Publisher: Georg Thieme Verlag.

REFERENCE 6: 138:137057 Selective synthesis of .beta.-amino esters and .beta.-lactams by rhodium-catalyzed Reformatsky-type reaction. Kanai, Kazuo; Wakabayashi, Hitoshi; Honda, Toshio (Fac. Pharmaceutical Sci., Hoshi Univ., Ebara 2-4-41, Shinagawa-ku, Tokyo, 142-8501, Japan). Heterocycles, 58, 47-51 (English) 2002. CODEN: HTCYAM. ISSN: 0385-5414. Publisher: Japan Institute of Heterocyclic Chemistry.

REFERENCE 7: 138:89329 Mannich-type reaction catalyzed by HBF4 in water: effect of the loading of surfactant. Akiyama, Takahiko; Itoh, Junji; Fuchibe, Kohei (Department of Chemistry, Faculty of Science, Gakushuin University, Tokyo, 171-8588, Japan). Synlett (8), 1269-1272 (English) 2002. CODEN: SYNLES. ISSN: 0936-5214. Publisher: Georg Thieme Verlag.

REFERENCE 8: 138:4505 Direct Synthesis of Imines from gem-Dibromomethylaryl Derivatives: Application to Unsymmetrically Substituted Bipyridine Frameworks. Weibel, Nicolas; Charbonniere, Loiec J.; Ziessel, Raymond F. (Laboratoire de Chimie Moleculaire, Ecole de Chimie Polymeres et Materiaux (ECPM), Strasbourg, 67087, Fr.). Journal of Organic Chemistry, 67(22), 7876-7879 (English) 2002. CODEN: JOCEAH. ISSN: 0022-3263. Publisher: American Chemical Society.

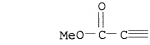
REFERENCE 9: 137:384610 Bronsted acid-catalyzed Mannich-type reactions in aqueous media. Akiyama, Takahiko; Takaya, Jun; Kagoshima, Hirotaka (Department of Chemistry, Faculty of Science, Gakushuin University, Tokyo, 171-8588, Japan). Advanced Synthesis & Catalysis, 344(3+4), 338-347 (English) 2002. CODEN: ASCAF7. ISSN: 1615-4150. Publisher: Wiley-VCH Verlag GmbH.

REFERENCE 10: 137:352750 Rhodium-catalyzed approach to Mannich-type products using aldimine, .alpha.,.beta.-unsaturated ester, and hydrosilane. Muraoka, Takako; Kamiya, Shin-ichi; Matsuda, Isamu; Itoh, Kenji (Department of Molecular Design and Engineering, Graduate School of Engineering, Nagoya University, Nagoya, Chikusa, 464-8603, Japan). Chemical Communications (Cambridge, United Kingdom) (12), 1284-1285 (English) 2002. CODEN: CHCOFS. ISSN: 1359-7345. Publisher: Royal Society of Chemistry.

L8 ANSWER 25 OF 38 REGISTRY COPYRIGHT 2003 ACS

Searched by: Mary Hale 308-4258 CM-1 1E01

RN **762-42-5** REGISTRY
CN 2-Butynedioic acid, dimethyl ester (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Acetylenedicarboxylic acid, dimethyl ester (6CI, 8CI)
OTHER NAMES:
CN 1,2-Bis(methoxycarbonyl)acetylene
CN 1,2-Bis(methoxycarbonyl)ethyne
CN Bis(carbomethoxy)acetylene
CN Bis(methoxycarbonyl)acetylene
CN Butynedioic acid dimethyl ester
CN Di(carbomethoxy)acetylene
CN Dimethyl 1,2-acetylenedicarboxylate
CN Dimethyl 2-butynedioate
CN Dimethyl acetylenedicarboxylate
CN Dimethyl butyne-1,4-dioate
CN Dimethyl butynedioate
CN Dimethyl ethynedicarboxylate
FS 3D CONCORD
MF C6 H6 O4
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, CSNB, DETHERM*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, NIOSHTIC, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6090 REFERENCES IN FILE CA (1962 TO DATE)
13 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
6101 REFERENCES IN FILE CAPLUS (1962 TO DATE)
71 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:205076 Preparation of diamines as factor Xa inhibitors. Ohta, Toshiharu; Komoriya, Satoshi; Yoshino, Toshiharu; Uoto, Kouichi; Nakamoto, Yumi; Naito, Hiroyuki; Mochizuki, Akiyoshi; Nagata, Tsutomu; Kanno, Hideyuki; Haginoya, Noriyasu; Yoshikawa, Kenji; Nagamochi, Masatoshi; Kobayashi, Syozo; Ono, Makoto (Daiichi Pharmaceutical Co., Ltd., Japan). PCT Int. Appl. WO 2003016302 A1 20030227, 847 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (Japanese). CODEN: PIXXD2. APPLICATION: WO 2002-JP8119 20020808. PRIORITY: JP 2001-243046 20010809;

Searched by: Mary Hale 308-4258 CM-1 1E01

JP 2001-311808 20011009; JP 2001-398708 20011228; WO 2002-JP2683 20020320; WO 2002-JP6141 20020620.

REFERENCE 2: 138:205012 A Novel Three-Component Reaction for the Diastereoselective Synthesis of 2H-Pyrimido[2,1-a]isoquinolines via 1,4-Dipolar Cycloaddition. Nair, Vijay; Sreekanth, A. R.; Abhilash, N.; Bhadbhade, Mohan M.; Gonnade, Rajesh C. (Organic Chemistry Division, Regional Research Laboratory, CSIR, Trivandrum, 695 019, India). Organic Letters, 4(21), 3575-3577 (English) 2002. CODEN: ORLEF7. ISSN: 1523-7060. Publisher: American Chemical Society.

REFERENCE 3: 138:204927 Reaction of 4-azidoquinoline N-oxide with dimethyl acetylenedicarboxylate. Ryzhakov, A. V.; Rodina, L. L. (Karelian Science Center, Russian Academy of Sciences, Petrozavodsk, 185003, Russia). Chemistry of Heterocyclic Compounds (New York, NY, United States)(Translation of Khimiya Geterotsiklicheskikh Soedinenii), 38(6), 700-701 (English) 2002. CODEN: CHCCAL. ISSN: 0009-3122. Publisher: Kluwer Academic/Consultants Bureau.

REFERENCE 4: 138:204901 Generation and cycloadditions of azirinium difluoromethanides - strained azomethine ylides. Khlebnikov, Alexander F.; Novikov, Mikhail S.; Amer, Amer A. (Department of Chemistry, St. Petersburg State University, St. Petersburg, 198504, Russia). Tetrahedron Letters, 43(47), 8523-8525 (English) 2002. CODEN: TELEAY. ISSN: 0040-4039. Publisher: Elsevier Science Ltd..

REFERENCE 5: 138:204899 Diisopropylamino isocyanide and DMAD in multiple component reactions (MCRs): novel synthesis of substituted 1-amino-3-pyrrolin-2-ones by reaction with aldehydes and dicarbonyl compounds. Nair, Vijay; Mathen, Joseph Swaroop; Viji, S.; Srinivas, R.; Nandakumar, M. V.; Varma, Luxmi (Organic Chemistry Division, Regional Research Laboratory, Trivandrum, 695 019, India). Tetrahedron, 58(40), 8113-8118 (English) 2002. CODEN: TETRAB. ISSN: 0040-4020. Publisher: Elsevier Science Ltd..

REFERENCE 6: 138:188031 Synthesis of highly functionalized phenylalanine derivatives via cross-enyne metathesis reactions. Kotha, Sambasivarao; Halder, Somnath; Brahmachary, Enugurthi (Department of Chemistry, Indian Institute of Technology-Bombay, Mumbai, 400 076, India). Tetrahedron, 58(45), 9203-9208 (English) 2002. CODEN: TETRAB. ISSN: 0040-4020. Publisher: Elsevier Science Ltd..

REFERENCE 7: 138:187998 Synthesis of (.+-.)-branched-chain azaisonucleosides via Michael addition of 5-nitro-2,2-pentamethylene-1,3-dioxane to methyl 2-bromoacrylate. Mironiuk-Puchalska, Ewa; Kolaczkowska, Ewa; Sas, Wojciech (Faculty of Chemistry, Warsaw University of Technology, Warsaw, 00-664, Pol.). Tetrahedron Letters, 43(46), 8351-8354 (English) 2002. CODEN: TELEAY. ISSN: 0040-4039. Publisher: Elsevier Science Ltd..

REFERENCE 8: 138:187859 Platinum complex catalyzed reaction of tributyltin cyanide with alkynes. Obora, Yasushi; Baleta, Angelo S.; Tokunaga, Makoto; Tsuji, Yasushi (Graduate School of Science, Catalysis Research Center and Division of Chemistry, Hokkaido University, Sapporo, 060-0811, Japan). Journal of Organometallic Chemistry, 660(2), 173-177 (English) 2002. CODEN: JORCAI. ISSN: 0022-328X. Publisher: Elsevier Science B.V..

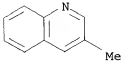
REFERENCE 9: 138:187696 Heterocycles by cascade reactions of versatile thioureido-acetamides. Schmeyers, Jens; Kaupp, Gerd (Organic Chemistry I, FB 9, University of Oldenburg, Oldenburg, D-26111, Germany). Tetrahedron, 58(36), 7241-7250 (English) 2002. CODEN: TETRAB. ISSN: 0040-4020.

Searched by: Mary Hale 308-4258 CM-1 1E01

Publisher: Elsevier Science Ltd..

REFERENCE 10: 138:187673 Catalytic Enantioselective [3 + 2]-Cycloadditions of Diazoketone-Derived Aryl-Substituted Carbonyl Ylides. Hodgson, David M.; Glen, Rebecca; Grant, Guy H.; Redgrave, Alison J. (Dyson Perrins Laboratory, Department of Chemistry, University of Oxford, Oxford, OX1 3QY, UK). Journal of Organic Chemistry, 68(2), 581-586 (English) 2003. CODEN: JOCEAH. ISSN: 0022-3263. Publisher: American Chemical Society.

L8 ANSWER 26 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **612-58-8** REGISTRY
CN Quinoline, 3-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 3-Methylquinoline
FS 3D CONCORD
MF C10 H9 N
CI COM
LC STN Files: ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, CSNB, DETHERM*, HODOC*, MEDLINE, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

208 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
209 REFERENCES IN FILE CAPLUS (1962 TO DATE)
9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:180186 A comparison of the binding of three series of nicotinic ligands. Lee, Mase; Dukat, Malgorzata; Liao, Liang; Flammia, Dwight; Imad Damaj, M.; Martin, Billy; Glennon, Richard A. (School of Pharmacy, Department of Medicinal Chemistry, Virginia Commonwealth University, Richmond, VA, 23298, USA). Bioorganic & Medicinal Chemistry Letters, 12(15), 1989-1992 (English) 2002. CODEN: BMCLE8. ISSN: 0960-894X. Publisher: Elsevier Science Ltd..

REFERENCE 2: 137:364891 Preparation of pyridinyl-fused bicyclic amide fungicides. Song, Ying (E.I. Du Pont de Nemours and Company, USA). PCT Int. Appl. WO 2002091830 A1 20021121, 84 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-US18394 20020514. PRIORITY: US 2001-PV290884 20010515.

Searched by: Mary Hale 308-4258 CM-1 1E01

REFERENCE 3: 137:262728 1H chemical shifts in NMR. Part 18.1 Ring currents and .pi.-electron effects in hetero-aromatics. Abraham, Raymond J.; Reid, Matthew (Chemistry Department, The University of Liverpool, Liverpool, L69 3BX, UK). Journal of the Chemical Society, Perkin Transactions 2 (6), 1081-1091 (English) 2002. CODEN: JCSPGI. ISSN: 1472-779X. Publisher: Royal Society of Chemistry.

REFERENCE 4: 137:249971 An alternative view of the thermal oxidative stability of jet fuels. Taylor, Spencer E. (Global Fuels Technology, BP Oil Technology Centre, Middlesex, TW16 7LN, UK). Preprints - American Chemical Society, Division of Petroleum Chemistry, 47(3), 165-169 (English) 2002. CODEN: ACPCAT. ISSN: 0569-3799. Publisher: American Chemical Society, Division of Petroleum Chemistry.

REFERENCE 5: 137:184468 Antibodies to argatroban derivatives and their use in therapeutic and diagnostic treatments. Thibaudeau, Karen; Blanchard, Dominique; Bridon, Dominique P.; Ezrin, Alan M.; Hardy, Margaret; Boudjellab, Nissab (Conjuchem, Inc., Can.). U.S. US 6440417 B1 20020827, 19 pp. (English). CODEN: USXXAM. APPLICATION: US 1999-434605 19991105. PRIORITY: US 1998-PV107475 19981106.

REFERENCE 6: 137:169440 One-Pot Synthesis of Pentacyclic Diamines from Quinolines by a New Zn/AcOH-Promoted Cascade Reaction. Gauffre, Jean-Christophe; Grignon-Dubois, Micheline; Rezzonico, Bernadette; Leger, Jean-Michel (Laboratoire de Chimie des Substances Vegetales, LCSV - Institut du Pin, Universite Bordeaux I, Talence, 33405, Fr.). Journal of Organic Chemistry, 67(14), 4696-4701 (English) 2002. CODEN: JOCEAH. ISSN: 0022-3263. Publisher: American Chemical Society.

REFERENCE 7: 137:154705 Preparation of adamantanols using catalysts containing imides and nitrogen oxides. Ishii, Yasutaka; Nakano, Tatsuya; Tatsumi, Atsuo (Daicel Chemical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002226404 A2 20020814, 18 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-70781 20010313. PRIORITY: JP 2000-361973 20001128.

REFERENCE 8: 137:48545 Intramolecular photoinduced electron transfer in zwitterionic quinolinium dyes - experimental and theoretical studies. Engel, Th.; Kab, G.; Lanig, H. (Computer Chemistry Center, University of Erlangen-Nurnberg, Erlangen, D-91052, Germany). Zeitschrift fuer Physikalische Chemie (Muenchen, Germany), 216(3), 305-332 (English) 2002. CODEN: ZPCFAX. ISSN: 0044-3336. Publisher: R. Oldenbourg Verlag.

REFERENCE 9: 137:32104 Biocatalytic oxidation of 2-methylquinoxaline to 2-quinoxalinecarboxylic acid. Wong, John W.; Watson, Harry A., Jr.; Bouressa, James F.; Burns, Michael P.; Cawley, James J.; Doro, Albert E.; Guzek, Donald B.; Hintz, Michael A.; McCormick, Ellen L.; Scully, Douglas A.; Siderewicz, Joseph M.; Taylor, William J.; Truesdell, Susan J.; Wax, Richard G. (Bioprocess Research and Development, Pfizer Global Research and Development, Groton, CT, 06340, USA). Organic Process Research & Development, 6(4), 477-481 (English) 2002. CODEN: OPRDFK. ISSN: 1083-6160. Publisher: American Chemical Society.

REFERENCE 10: 137:20065 Evaluation of C-H bond dissociation energies in alkylaromatic hydrocarbons and the enthalpies of corresponding radicals from kinetic data. Kromkin, E. A.; Tumanov, V. E.; Denisov, E. T. (Inst. Problem Khim. Fiz., RAN, Chernogolovka, Russia). Neftekhimiya, 42(1), 3-13 (Russian) 2002. CODEN: NEFTAH. ISSN: 0028-2421. Publisher: Nauka.

L8 ANSWER 27 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **611-32-5** REGISTRY

Searched by: Mary Hale 308-4258 CM-1 1E01

CN Quinoline, 8-methyl- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 8-Methylquinoline
FS 3D CONCORD
MF C10 H9 N
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, CSNB, DETHERM*, EMBASE, GMELIN*, HODOC*, MEDLINE, NIOSHTIC, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

419 REFERENCES IN FILE CA (1962 TO DATE)
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
420 REFERENCES IN FILE CAPLUS (1962 TO DATE)
9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:214672 Chemical mass shifts in quadrupole ion traps as analytical characteristics of nitro-aromatic compounds. Li, Hongyan; Peng, Yanan; Plass, Wolfgang R.; Cooks, R. Graham (Department of Chemistry, Purdue University, West Lafayette, IN, 47907-1393, USA). International Journal of Mass Spectrometry, 222(1-3), 481-491 (English) 2003. CODEN: IMSPF8. ISSN: 1387-3806. Publisher: Elsevier Science B.V..

REFERENCE 2: 138:162701 Comparison of different retention models in normal- and reversed-phase liquid chromatography with binary mobile phases. Zapala, Wojciech; Kaczmarski, Krzysztof; Kowalska, Teresa (Department of Chemical Engineering and Process Control, Chemical Faculty, Rzeszow University of Technology, Rzeszow, 35-959, Pol.). Journal of Chromatographic Science, 40(10), 575-580 (English) 2002. CODEN: JCHSBZ. ISSN: 0021-9665. Publisher: Preston Publications.

REFERENCE 3: 138:106327 QSPR study of quenching of singlet oxygen by aliphatic amines. Zhu, Chun M.; Wang, Liang Y.; Kong, Lin R.; Yang, Xi; Wang, Lian S.; Zheng, Shao J.; Chen, Fei L.; Feng, Man Z.; Huang, Zong (Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences, Canton, 510070, Peop. Rep. China). Toxicological and Environmental Chemistry, 79(1-2), 47-54 (English) 2001. CODEN: TECSDY. ISSN: 0277-2248. Publisher: Gordon & Breach Science Publishers.

REFERENCE 4: 138:84853 Development of Binary Classification of Structural Chromosome Aberrations for a Diverse Set of Organic Compounds from Molecular Structure. Serra, J. R.; Thompson, E. D.; Jurs, P. C. (Chemistry Department, Pennsylvania State University, University Park, PA, 16802, USA). Chemical Research in Toxicology, 16(2), 153-163 (English)

Searched by: Mary Hale 308-4258 CM-1 1E01

2003. CODEN: CRTOEC. ISSN: 0893-228X. Publisher: American Chemical Society.

REFERENCE 5: 138:32503 Retention mechanism of model compounds on polar bonded stationary phases in normal phase systems. Waksmundzka-Hajnos, Monika; Petruczynik, Anna; Soczewinski, Edward; Hawryl, Anna (Department of Inorganic and Analytical Chemistry, Medical University, Lublin, 20-081, Pol.). Chemia Analityczna (Warsaw, Poland), 47(4), 483-505 (English) 2002. CODEN: CANWAJ. ISSN: 0009-2223. Publisher: Polish Chemical Society.

REFERENCE 6: 138:11404 CXCR4 antagonistic drugs comprising nitrogen-containing compounds. Yanaka, Mikiro; Yamazaki, Toru; Bannai, Kenji; Hirose, Kunitaka (Kureha Chemical Industry Company, Limited, Japan). PCT Int. Appl. WO 2002094261 A1 20021128, 227 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (Japanese). CODEN: PIXXD2. APPLICATION: WO 2002-JP4846 20020520. PRIORITY: JP 2001-154904 20010524.

REFERENCE 7: 137:279076 The reactions of quinoline and its derivatives with dimethyl acetylenedicarboxylate (DMAD). Yildirir, Yilmaz; Aydogan, Emine; Disli, Ali (Department of Chemistry, Faculty of Arts and Sciences, Gazi University, Ankara, 06500, Turk.). International Journal of Chemistry, 12(1), 9-12 (English) 2002. CODEN: INJCEW. Publisher: Institute of Science & Technology.

REFERENCE 8: 137:279075 Ruthenium-catalyzed synthesis of quinolines via reductive heteroannulation of nitroarenes with 3-amino-1-propanols. Cho, Chan Sik; Kim, Tae Kyung; Kim, Tae-Jeong; Shim, Sang Chul; Yoon, Nam Sik (Department of Industrial Chemistry, College of Engineering, Kyungpook National University, Taegu, 702-701, S. Korea). Journal of Heterocyclic Chemistry, 39(2), 291-294 (English) 2002. CODEN: JHTCAD. ISSN: 0022-152X. Publisher: HeteroCorporation.

REFERENCE 9: 137:154705 Preparation of adamantanols using catalysts containing imides and nitrogen oxides. Ishii, Yasutaka; Nakano, Tatsuya; Tatsumi, Atsuo (Daicel Chemical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002226404 A2 20020814, 18 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-70781 20010313. PRIORITY: JP 2000-361973 20001128.

REFERENCE 10: 137:109191 Oxidation of 6- and 8-methylquinolines upon UV illumination in the presence of powdered TiO2 photocatalyst. Navio, J. A.; Garcia-Gomez, M.; Pradera, M. A.; Fuentes, J. (Instituto de Ciencia de Materiales de Sevilla, Centro Mixto CSIC-Universidad de Sevilla and Dpto. de Quimica Inorganica, Universidad de Sevilla, Seville, 41092, Spain). Photochemical & Photobiological Sciences, 1(2), 133-135 (English) 2002. CODEN: PPSHCB. ISSN: 1474-905X. Publisher: Royal Society of Chemistry.

L8 ANSWER 28 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **538-51-2** REGISTRY
CN Benzenamine, N-(phenylmethylene)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Aniline, N-benzylidene- (8CI)
OTHER NAMES:

Searched by: Mary Hale 308-4258 CM-1 1E01

CN (Benzylidene)phenylamine
CN Benzaldehyde anil
CN Benzaldehyde N-phenylimine
CN Benzylideneaniline
CN M4
CN M4 (amine)
CN N-(Phenylmethylene)benzenamine
CN N-(Phenylmethylidene)benzenamine
CN N-Benzalaniline
CN N-Benzylideneaniline
CN N-Phenylbenzaldimine
CN N-Phenylbenzenemethanimine
CN N-Phenylbenzylideneimine
CN Phenyl(benzylidene)amine
FS 3D CONCORD
MF C13 H11 N
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, DETHERM*, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, MRCK*, NIOSHTIC, SPECINFO, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2110 REFERENCES IN FILE CA (1962 TO DATE)
52 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2112 REFERENCES IN FILE CAPLUS (1962 TO DATE)
41 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:187432 Remarkable enhancement of Lewis acidity of chlorosilane by the combined use of indium(III) chloride. Onishi, Yoshiyuki; Ito, Takeshi; Yasuda, Makoto; Baba, Akio (Graduate School of Engineering, Department of Molecular Chemistry and Handai Frontier Research Center, Osaka University, Suita, Osaka, 565-0871, Japan). Tetrahedron, 58(41), 8227-8235 (English) 2002. CODEN: TETRAB. ISSN: 0040-4020. Publisher: Elsevier Science Ltd..

REFERENCE 2: 138:187401 Preparation of hydroxycarboxylic esters and related compounds via a Reformatskii reaction of active halogen compounds with aldehydes, ketones, imines, etc. in carboxylate ester solvents. Sorger, Klas; Petersen, Hermann; Stohrer, Juergen (Consortium fuer Elektrochemische Industrie GmbH, Germany). Ger. DE 10161335 C1 20030220, 10 pp. (German). CODEN: GWXXAW. APPLICATION: DE 2001-10161335 20011213.

REFERENCE 3: 138:170129 Low-valent titanium induced cyclization of dimeric dianions of anils with triphosgene. A safe and efficient method for the syntheses of substituted imidazolidine 2-ones. Li, Zhifang; Zhang, Yongmin (Department of Chemistry, Zhejiang University, Hangzhou, 310028, Peop. Rep. China). Synthetic Communications, 32(17), 2613-2618 (English) 2002. CODEN: SYNCAV. ISSN: 0039-7911. Publisher: Marcel Dekker, Inc..

REFERENCE 4: 138:169922 Participation of self-generated polyaniline support in copper(II) catalysed oxidative reaction of phenyl aldimines. Handique,

Searched by: Mary Hale 308-4258 CM-1 1E01

Jyotirekha G.; Borah, Lukumoni; Sarma, Rupam Jyoti; Baruah, Jubaraj B. (Department of Chemistry, Indian Institute of Technology, Assam, Guwahati, 781 039, India). Journal of Molecular Catalysis A: Chemical, 188(1-2), 63-69 (English) 2002. CODEN: JMCCF2. ISSN: 1381-1169. Publisher: Elsevier Science B.V..

REFERENCE 5: 138:169847 A convenient synthetic access to .delta.-amino-.gamma.,.gamma.-difluoro-.beta.-ketoesters. Wang, Yanli; Zhu, Shizheng (Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, 200032, Peop. Rep. China). Synthesis (13), 1813-1818 (English) 2002. CODEN: SYNTBF. ISSN: 0039-7881. Publisher: Georg Thieme Verlag.

REFERENCE 6: 138:153398 1,3-Dipolar Cycloaddition of Azomethine Ylides Generated from Schiff Bases and Difluorocarbene to Symmetric Olefins. Novikov, M. S.; Khlebnikov, A. F.; Sidorina, E. S.; Masalev, A. E.; Kopf, J.; Kostikov, R. R. (St. Petersburg State University, St. Petersburg, 198504, Russia). Russian Journal of Organic Chemistry (Translation of Zhurnal Organicheskoi Khimii), 38(5), 672-682 (English) 2002. CODEN: RJOCEQ. ISSN: 1070-4280. Publisher: MAIK Nauka/Interperiodica Publishing.

REFERENCE 7: 138:153290 Use of .alpha.-allyloxy-.alpha.-trimethylsiloxyacetate for reductive imino aldol reaction promoted by titanium tetraiodide: a rapid access to .beta.-amino-.alpha.-hydroxy esters. Shimizu, Makoto; Sahara, Tetsuya (Department of Chemistry for Materials, Mie University, Mie, 514-8507, Japan). Chemistry Letters (9), 888-889 (English) 2002. CODEN: CMLTAG. ISSN: 0366-7022. Publisher: Chemical Society of Japan.

REFERENCE 8: 138:153261 Crossed pinacol coupling reaction between aldehydes and imines: a rapid access to 1,2-amino alcohols. Shimizu, Makoto; Iwata, Atsushi; Makino, Hiroaki (Department of Chemistry for Materials, Mie University, Mie, 514-8507, Japan). Synlett (9), 1538-1540 (English) 2002. CODEN: SYNLES. ISSN: 0936-5214. Publisher: Georg Thieme Verlag.

REFERENCE 9: 138:153008 Lithiation of 1-(Chloromethyl)benzotriazole: Generation and Elaboration of Benzotriazolyloxiranes. Katritzky, Alan R.; Manju, Kavita; Steel, Peter J. (Center for Heterocyclic Compounds, Department of Chemistry, University of Florida, Gainesville, FL, 32611-7200, USA). Journal of Organic Chemistry, 68(2), 407-411 (English) 2003. CODEN: JOCEAH. ISSN: 0022-3263. Publisher: American Chemical Society.

REFERENCE 10: 138:152999 (2R*, SS*)-N-phenyl-N-(2-N'-tert-butyldiphenylsilyl-S-phenylsulfonimidoyl-1-phenyl)ethylamine. Dikic, Branko; Pyne, Stephen G.; Skelton, Brian W.; White, Allan H. (Department of Chemistry, University of Wollongong, Wollongong, 2522, Australia). Sulfur Letters, 25(2), 63-66 (English) 2002. CODEN: SULED2. ISSN: 0278-6117. Publisher: Taylor & Francis Ltd..

L8 ANSWER 29 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **491-35-0** REGISTRY
CN Quinoline, 4-methyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Lepidine (6CI, 8CI)
OTHER NAMES:
CN .gamma.-Methylquinoline
CN 4-Lepidine
CN 4-Methylquinoline

Searched by: Mary Hale 308-4258 CM-1 1E01

CN Cincholepidine
CN Lepidin
FS 3D CONCORD
MF C10 H9 N
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, CSNB, DDFU, DETHERM*, DRUGU, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, NAPRALERT, NIOSHTIC, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

810 REFERENCES IN FILE CA (1962 TO DATE)
12 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
811 REFERENCES IN FILE CAPLUS (1962 TO DATE)
62 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:197713 Copper(II) salicylideneglycinate complexes as potential antimicrobial agents. Valent, Aladar; Melnik, Milan; Hudecova, Daniela; Dudova, Barbora; Kivekas, Raikko; Sundberg, Markku R. (Faculty of Pharmacy, Department of Chemical Theory of Drugs, Comenius University, Bratislava, 83232, Slovakia). Inorganica Chimica Acta, 340, 15-20 (English) 2002. CODEN: ICHAA3. ISSN: 0020-1693. Publisher: Elsevier Science B.V..

REFERENCE 2: 138:171813 Synthesis of thiazole orange monomer for the TOTO nucleic acid fluorescent probe. Song, Jian; Feng, Rong-xiu; Chen, Lei; Wang, Jun-bo; Xie, Yang (College of Pharmaleuticals and Biotechnology, Tianjin University, Tianjin, 300072, Peop. Rep. China). Jingxi Huagong, 19(8), 469-470, 495 (Chinese) 2002. CODEN: JIHUFJ. ISSN: 1003-5214. Publisher: Jingxi Huagong Bianjibu.

REFERENCE 3: 138:156753 Relationship between Interfacial Energy and Corrosion of Steel in Heterocyclic Compounds. Soprunyuk, P. M.; Yuzevych, V. M.; Luhovyi, P. V.; Kornii, V. V. (Karpenko Physicomechanical Institute, Ukrainian Academy of Sciences, Lvov, Ukraine). Materials Science (New York, NY, United States)(Translation of Fiziko-Khimichna Mekhanika Materialiv), 38(1), 88-94 (English) 2002. CODEN: MSCIEQ. ISSN: 1068-820X. Publisher: Kluwer Academic/Consultants Bureau.

REFERENCE 4: 138:147691 Rhodacyanin dye compounds as antimalarial medicines. Ihara, Masataka; Takasu, Kiyomasa; Igami, Hiroshi; Wataya, Yusuke; Kim, Hye-Sook (Japan Science and Technology Corporation, Japan). Jpn. Kokai Tokkyo Koho JP 2003034642 A2 20030207, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-220577 20010719.

Searched by: Mary Hale 308-4258 CM-1 1E01

REFERENCE 5: 138:89650 N-Bridgehead heterocyclic compounds thenoyl-substituted. I Indolizines and benzoindolizines. Georgescu, Emilian I.; Georgescu, Florentina; Roibu, Constantin; Draghici, Constantin C.; Caproiu, Miron T. (S. C. Oltchim S. A. Research Center, Ramnicu Valcea, 1000, Rom.). Revue Roumaine de Chimie, Volume Date 2001, 46(4), 357-362 (English) 2002. CODEN: RRCHAX. ISSN: 0035-3930. Publisher: Editura Academiei Romane.

REFERENCE 6: 138:44520 Fragrant substances for improving storage stability and solubility of poly(vinyl alcohol) and poly(vinyl alcohol)-cellulose blends. Meller, Gerhard; Maier, Hans (Drom Fragrances International K.-G., Germany). PCT Int. Appl. WO 2002098966 A2 20021212, 22 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (German). CODEN: PIXXD2. APPLICATION: WO 2002-EP6246 20020607. PRIORITY: DE 2001-10130971 20010607.

REFERENCE 7: 138:4598 Preparation of substituted 5,6-dihydro-4H-pyrrolo[1,2-b]pyrazoles as TGF-.beta. signal transduction inhibitors. Sawyer, Jason Scott; Beight, Douglas Wade; Ciapetti, Paola; Decollo, Todd Vincent; Godfrey, Alexander Glenn; Goodson, Theodore, Jr.; Herron, David Kent; Li, Hong-yu; Liao, Junkai; Mcmillen, William Thomas; Miller, Shawn Christopher; Mort, Nicolas Anthony; Yingling, Jonathan Michael; Smith, Edward C. R. (Eli Lilly and Company, USA; et al.). PCT Int. Appl. WO 2002094833 A1 20021128, 305 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-US11884 20020513. PRIORITY: US 2001-PV293464 20010524.

REFERENCE 8: 137:370355 Preparation of .beta.-amino acid arylsulfonamide ether derivatives as inhibitors of interleukin-1.beta. converting enzyme. Knobelsdorf, James; Hays, Sheryl; Stankovic, Charles J.; Para, Kimberly S.; Connolly, Michael K.; Galatsis, Paul; Harter, William; Shahripor, Aurash B.; Plummer, Mark Stephen; Lunney, Beth; Janssen, Bernd; Fell, Jay Bradford (Abbott G.m.b.H. & Co. K.-G., Germany; Warner-Lambert Company; et al.). PCT Int. Appl. WO 2002089749 A2 20021114, 214 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-US15002 20020510. PRIORITY: US 2001-PV289950 20010510.

REFERENCE 9: 137:357425 Comparative investigations of genotoxicity in coke

Searched by: Mary Hale 308-4258 CM-1 1E01

plant effluents using microbial short-term assays and GC/MS analysis. Siersdorfer, Christof; Bungert, Michael; Kaltwasser, Heinrich (Institut fur Mikrobiologie, Universitat des Saarlandes, Saarbrucken, D-66041, Germany). Vom Wasser, 91, 87-99 (German) 1998. CODEN: VJWWAU. ISSN: 0083-6915. Publisher: Wiley-VCH Verlag GmbH & Co. KGaA.

REFERENCE 10: 137:262728 1H chemical shifts in NMR. Part 18.1 Ring currents and .pi.-electron effects in hetero-aromatics. Abraham, Raymond J.; Reid, Matthew (Chemistry Department, The University of Liverpool, Liverpool, L69 3BX, UK). Journal of the Chemical Society, Perkin Transactions 2 (6), 1081-1091 (English) 2002. CODEN: JCSPGI. ISSN: 1472-779X. Publisher: Royal Society of Chemistry.

L8 ANSWER 30 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **141-78-6** REGISTRY
CN Acetic acid ethyl ester (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN Acetic acid, ethyl ester
CN Acetic ether
CN Acetidin
CN Acetoxyethane
CN Ethyl acetate
CN Ethyl ethanoate
CN EtOAc
CN Vinegar naphtha
FS 3D CONCORD
MF C4 H8 O2
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

Et—O—Ac

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

20910 REFERENCES IN FILE CA (1962 TO DATE)
103 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
20947 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:214680 Phase-transfer catalytic determination of phenols as methylated derivatives by gas chromatography with flame ionization and mass-selective detection. Fiamegos, Yiannis C.; Nanos, Christos G.; Pilidis, George A.; Stalikas, Constantine D. (Department of Chemistry, University of Ioannina, Ioannina, 451 10, Greece). Journal of Chromatography, A, 983(1-2), 215-223 (English) 2003. CODEN: JCRAEY. ISSN: 0021-9673. Publisher: Elsevier Science B.V..

REFERENCE 2: 138:214651 Comparison of the sorption properties of porous polystyrene sorbents of various types. Belyakova, L. D.; Voloshchuk, A.

Searched by: Mary Hale 308-4258 CM-1 1E01

M.; Vorob'eva, L. M.; Kurbanbekov, E.; Larionov, O. G.; Tsyurupa, M. P.; Pavlova, L. A.; Davankov, V. A. (Inst. Fiz. Khim., RAN, Moscow, Russia). Zhurnal Fizicheskoi Khimii, 76(9), 1674-1681 (Russian) 2002. CODEN: ZFKHA9. ISSN: 0044-4537. Publisher: MAIK Nauka.

REFERENCE 3: 138:214645 Odorant detective ability of QCM sensors coated with derivatives of dialkyl benzenedicarboxylate. Fujii, Shinjiro; Hirota, Kazuhiro (Graduate School of National Science, Dept. of Mecha.& Sys. Eng., Okayama University, Okayama, 700-8530, Japan). Nippon Aji to Nioi Gakkaishi, 9(3), 733-736 (Japanese) 2002. CODEN: NNGAEW. ISSN: 1340-4806. Publisher: Nippon Aji to Nioi Gakkai.

REFERENCE 4: 138:214644 Quarts-crystal microbalances coated with benzenecarboxylic acid alkyl ester: effect of number of alkyl carbon chain and benzene ring substituents on odor sensing. Koyama, Kanako; Hirota, Kazuhiro (Faculty of Engineering, Department of systems Engineering, Okayama University, Okayama, 700-8530, Japan). Nippon Aji to Nioi Gakkaishi, 9(3), 729-732 (Japanese) 2002. CODEN: NNGAEW. ISSN: 1340-4806. Publisher: Nippon Aji to Nioi Gakkai.

REFERENCE 5: 138:210974 Excess volume. Methanol-ethyl ethanoate system. Ortega, J. (Laboratorio de Termodinamica y Fisicoquimica, Escuela Superior de Ingenieros Industriales, Universidad de Las Palmas de Gran Canaria, Las Palmas de Gran Canaria, 35071, Spain). International DATA Series, Selected Data on Mixtures, Series A: Thermodynamic Properties of Non-Reacting Binary Systems of Organic Substances, 31(1), 23 (English) 2003. CODEN: ISDMAT. ISSN: 0147-1503. Publisher: National Institute of Standards and Technology.

REFERENCE 6: 138:210913 Liquid-vapor equilibrium. Methanol-ethylethanoate system. Ortega, J. (Laboratorio de Termodinamica y Fisicoquimica, Escuela Superior de Ingenieros Industriales, Universidad de Las Palmas de Gran Canaria, Las Palmas de Gran Canaria, 35071, Spain). International DATA Series, Selected Data on Mixtures, Series A: Thermodynamic Properties of Non-Reacting Binary Systems of Organic Substances, 31(1), 15 (English) 2003. CODEN: ISDMAT. ISSN: 0147-1503. Publisher: National Institute of Standards and Technology.

REFERENCE 7: 138:210912 Liquid-vapor equilibrium. Methanol-ethyl ethanoate system. Ortega, J. (Laboratorio de Termodinamica y Fisicoquimica, Escuela Superior de Ingenieros Industriales, Universidad de Las Palmas de Gran Canaria, Las Palmas de Gran Canaria, 35071, Spain). International DATA Series, Selected Data on Mixtures, Series A: Thermodynamic Properties of Non-Reacting Binary Systems of Organic Substances, 31(1), 14 (English) 2003. CODEN: ISDMAT. ISSN: 0147-1503. Publisher: National Institute of Standards and Technology.

REFERENCE 8: 138:210353 An improved process for the preparation of amorphous atorvastatin calcium salt (2:1). Suri, Sanjay; Singh, J.; Sarin, G. S.; Bansal, B. R. (Morepen Laboratories Ltd., India). PCT Int. Appl. WO 2003018547 A2 20030306, 14 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-IN152 20010831.

Searched by: Mary Hale 308-4258 CM-1 1E01

REFERENCE 9: 138:210085 A cosolvency model to predict solubility of drugs at several temperatures from a limited number of solubility measurements. Jouyban, Abolghasem; Romero, Susana; Chan, Hak-Kim; Clark, Brian John; Bustamante, Pilar (School of Pharmacy, Tabriz University of Medical Sciences, Tabriz, 51664, Iran). Chemical & Pharmaceutical Bulletin, 50(5), 594-599 (English) 2002. CODEN: CPBTAL. ISSN: 0009-2363. Publisher: Pharmaceutical Society of Japan.

REFERENCE 10: 138:210071 Crystallization and solid state properties of molecules of pharmaceutical interest. Bauer, M. (Department International d'Analyse, Sanofi-Synthelabo, Toulouse, F 31036, Fr.). Annales Pharmaceutiques Francaises, 60(3), 152-160 (French) 2002. CODEN: APFRAD. ISSN: 0003-4509. Publisher: Masson Editeur.

L8 ANSWER 31 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **126-33-0** REGISTRY
CN Thiophene, tetrahydro-, 1,1-dioxide (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1,1-Dioxothiolan
CN Bondelane A
CN Bondolane A
CN Cyclic tetramethylene sulfone
CN Cyclotetramethylene sulfone
CN Sulfolan
CN Sulfolane
CN Sulpholane
CN Tetrahydrothiophene 1,1-dioxide
CN Tetrahydrothiophene dioxide
CN Tetrahydrothiophene S,S-dioxide
CN Tetramethylene sulfone
CN Thiacyclopentane dioxide
CN Thiolane 1,1-dioxide
CN Thiophane 1,1-dioxide
CN Thiophane dioxide
FS 3D CONCORD
MF C4 H8 O2 S
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DETHERM*, DIPPR*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3367 REFERENCES IN FILE CA (1962 TO DATE)

Searched by: Mary Hale 308-4258 CM-1 1E01

53 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3374 REFERENCES IN FILE CAPLUS (1962 TO DATE)
68 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:201364 Derivatized polystyrene and other polymer supports for immobilization and spectroscopic studies. Clark, Brian R. (Aventis Pharmaceuticals Holdings Inc., USA). U.S. US 6528292 B1 20030304, 7 pp., Cont. of U.S. Ser. No. 55,528. (English). CODEN: USXXAM. APPLICATION: US 1995-467260 19950606. PRIORITY: US 1987-55528 19870529.

REFERENCE 2: 138:195817 Method of activating a protective layer on a photographic element employing an organic solvent in the wash solution. Whitesides, Thomas H.; Jasek, Amy E. (Eastman Kodak Company, USA). U.S. US 6524777 B1 20030225, 19 pp. (English). CODEN: USXXAM. APPLICATION: US 2001-944489 20010830.

REFERENCE 3: 138:188647 Manufacture of low-molecular-weight epoxy resins. Pielichowski, Jan; Czub, Piotr; Penczek, Piotr (Politechnika Krakowska Im. Tadeusza Kosciuszki, Pol.). Pol. PL 182431 B1 20020131, 4 pp. (Polish). CODEN: POXXA7. APPLICATION: PL 1996-312802 19960212.

REFERENCE 4: 138:173333 Lithium secondary battery for mounting on substrate by reflow soldering. Imanishi, Masahiro; Nishiguchi, Nobuhiro; Fujimoto, Minoru; Nakajima, Hiroshi; Yoshimura, Seiji; Kamino, Maruo (Sanyo Electric Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2003045485 A2 20030214, 8 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-226774 20010726.

REFERENCE 5: 138:170005 Asymmetric alkene epoxidation with chromium oxo salen complexes Effect of .pi.-rich and other types of additives. Dalton, Cormac T.; Ryan, Kenneth M.; Langan, Ivan J.; Coyne, Eamonn J.; Gilheany, Declan G. (Chemistry Department, Conway Institute of Biomolecular and Biomedical Sciences, University College Dublin, Dublin, 4, Ire.). Journal of Molecular Catalysis A: Chemical, 187(2), 179-187 (English) 2002. CODEN: JMCCF2. ISSN: 1381-1169. Publisher: Elsevier Science B.V..

REFERENCE 6: 138:158151 Oxygen uptake characteristics of soil inoculum amended with thiophene derivatives. Kim, Chang Gyun; Chon, Bohyun (Regional Research Center for Coastal Environments of Yellow Sea, Inha University, Incheon, 402-751, S. Korea). Korean Journal of Chemical Engineering, 19(5), 773-779 (English) 2002. CODEN: KJCHE6. ISSN: 0256-1115. Publisher: Korean Institute of Chemical Engineers.

REFERENCE 7: 138:144938 Singlet oxygen generation from H2O2/MoO42-: peroxidation of hydrophobic substrates in pure organic solvents. Nardello, Veronique; Bogaert, Stephane; Alsters, Paul L.; Aubry, Jean-Marie (ENSCL, CNRS, Equipe de Recherches Oxydation et Formulation, LCOM, UMR, Villeneuve d'Ascq, 108 F-59652, Fr.). Tetrahedron Letters, 43(48), 8731-8734 (English) 2002. CODEN: TELEAY. ISSN: 0040-4039. Publisher: Elsevier Science Ltd..

REFERENCE 8: 138:140080 High energy density hybrid battery/supercapacitor system. Amatucci, Glenn (Telcordia Technologies, Inc., USA). U.S. US 6517972 B1 20030211, 9 pp. (English). CODEN: USXXAM. APPLICATION: US 2000-650364 20000929.

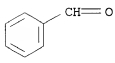
REFERENCE 9: 138:136815 Comparative evaluation of oxidizing and nucleophilic properties of some .alpha.-nucleophiles. Cassagne, Thierry; Cristau, Henri-Jean; Delmas, Gerard; Desgranges, Michel; Lion, Glaude; Magnaud, Gilbert; Torreilles, Eliane; Virieux, David (lab. Chimie Organique ENSCM, UMR 5076 du CNRS, Montpellier, 34296, Fr.). Journal of Chemical Research,

Searched by: Mary Hale 308-4258 CM-1 1E01

Synopses (7), 336-338 (English) 2002. CODEN: JRPSDC. ISSN: 0308-2342. Publisher: Science Reviews.

REFERENCE 10: 138:129014 Dibasic ester in solvent for stripping of photoresists on integrated circuits. Sahbari, Javad J. (Siliconvalley Chemlabs, Inc., USA). U.S. US 6511547 B1 20030128, 6 pp., Cont.-in-part of U.S. Ser. No. 328,176, abandonded. (English). CODEN: USXXAM. APPLICATION: US 2000-661723 20000914. PRIORITY: US 1996-593628 19960130; US 1998-63627 19980420; US 1999-328176 19990608.

L8 ANSWER 32 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **100-52-7** REGISTRY
CN Benzaldehyde (7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN Artificial Almond Oil
CN Benzaldehyde FFC
CN Benzenecarbonal
CN Benzenecarboxaldehyde
CN Benzoic aldehyde
CN Phenylformaldehyde
CN Phenylmethanal
FS 3D CONCORD
MF C7 H6 O
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

43048 REFERENCES IN FILE CA (1962 TO DATE)
665 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
43182 REFERENCES IN FILE CAPLUS (1962 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:210436 Polarographic determination of benzaldehyde in benzyl alcohol and sodium diclofenac injection formulations. Kazemifard, Amir G.; Moore, Douglas E.; Mohammadi, A. (College of Pharmacy, Medical Sciences University of Tehran, Tehran, Iran). Journal of Pharmaceutical and Biomedical Analysis, 30(2), 257-262 (English) 2002. CODEN: JPBADA. ISSN: 0731-7085. Publisher: Elsevier Science B.V..

REFERENCE 2: 138:210107 Rapid determination of liposome-water partition coefficients (Klw) using liposome electrokinetic chromatography (LEKC).

Searched by: Mary Hale 308-4258 CM-1 1E01

Burns, Scott T.; Khaledi, Morteza G. (Department of Chemistry, North Carolina State University, Raleigh, NC, 27696-8204, USA). Journal of Pharmaceutical Sciences, 91(7), 1601-1612 (English) 2002. CODEN: JPMSAE. ISSN: 0022-3549. Publisher: Wiley-Liss, Inc..

REFERENCE 3: 138:209893 The composition and antimicrobial activity of the essential oil of the resurrection plant Myrothamnus flabellifolius. Viljoen, A. M.; Klepser, M. E.; Ernst, E. J.; Keele, D.; Roling, E.; van Vuuren, S.; Demirci, B.; Baser, K. H. C.; van Wyk, B.-E. (Department of Pharmacy and Pharmacology, University of the Witwatersrand, Parktown, 2193, S. Afr.). South African Journal of Botany, 68(1), 100-105 (English) 2002. CODEN: SAJBDD. ISSN: 0254-6299. Publisher: NISC Pty Ltd..

REFERENCE 4: 138:209311 Speciation of organic compounds from the exhaust of trucks and buses: effect of fuel and after-treatment on vehicle emission profiles. Lev-On, Miriam; LeTavec, Chuck; Uihlein, Jim; Kimura, Ken; Alleman, Teresa L.; Lawson, Douglas R.; Vertin, Keith; Gautam, Mridul; Thompson, Gregory J.; Wayne, W. Scott; Clark, Nigel; Okamoto, Robert; Rieger, Paul; Yee, Gary; Zielinska, Barbara; Sagebiel, John; Chatterjee, Sougato; Hallstrom, Kevin (BP, CA, USA). Society of Automotive Engineers, [Special Publication] SP, SP-1723(Diesel Particulate Systems and Gaseous Emissions), 119-144 (English) 2002. CODEN: SAESA2. ISSN: 0099-5908. Publisher: Society of Automotive Engineers.

REFERENCE 5: 138:206475 Synthesis of meso-substituted trimethine cyanine dyes and evaluation of their sensitivities in sensitized photo-polymerization. Kimura, Masaru; Mitekura, Hirofumi; No, Tomoko; Suzuki, Kazuyoshi (Department of Chemistry, Faculty of Science, Okayama University, Okayama, 700-8530, Japan). Bulletin of the Chemical Society of Japan, 75(12), 2655-2660 (English) 2002. CODEN: BCSJA8. ISSN: 0009-2673. Publisher: Chemical Society of Japan.

REFERENCE 6: 138:206148 Plastic articles comprising novel polymeric blue anthraquinone-derivative colorants. Xia, Jusong (Milliken & Company, USA). U.S. US 6528564 B1 20030304, 15 pp. (English). CODEN: USXXAM. APPLICATION: US 2001-976139 20011012.

REFERENCE 7: 138:205406 Novel copolymers of trisubstituted ethylenes and styrene. I. Alkyl and alkoxy ring-substituted ethyl 2-cyano-1-oxo-3-phenyl-2-propenylcarbamates. Kharas, Gregory B.; Fuerst, Antonia M.; Scola, Anthony, III; Bavirsha, Daniel J.; Bernau, Bradley M.; Brown, Santkileo K.; Ece, Pasa; Dabrowski, Anna N.; De Angelo, Penny; Fatemi, Farrah R.; Watson, Kenneth (Chemistry Department, DePaul University, Chicago, IL, 60614-3214, USA). Journal of Macromolecular Science, Pure and Applied Chemistry, A39(12), 1383-1391 (English) 2002. CODEN: JSPCE6. ISSN: 1060-1325. Publisher: Marcel Dekker, Inc..

REFERENCE 8: 138:205242 Methods for the synthesis of amines such as ephedrine and intermediates via reductive animation of ketones. Smallridge, Andrew John; Trewhella, Maurice Arthur; Wilkinson, Kylie Anne (Polychip Pharmaceuticals Pty Ltd., Australia; Victoria University of Technology). PCT Int. Appl. WO 2003018531 A1 20030306, 29 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2.

Searched by: Mary Hale 308-4258 CM-1 1E01

APPLICATION: WO 2002-AU1148 20020826. PRIORITY: AU 2001-7326 20010828.

REFERENCE 9: 138:205142 Preparation and Chemistry of Phosphoranyl-Derived Iodanes. Zhdankin, Viktor V.; Maydanovych, Olena; Herschbach, Jon; Bruno, Jessica; Matveeva, Elena D.; Zefirov, Nikolai S. (Department of Chemistry, University of Minnesota Duluth, Duluth, MN, 55812, USA). Journal of Organic Chemistry, 68(3), 1018-1023 (English) 2003. CODEN: JOCEAH. ISSN: 0022-3263. Publisher: American Chemical Society.

REFERENCE 10: 138:205136 A robust, reactive, and remarkably simple to prepare sterically encumbered meta-terphenyl ligand. Smith, Rhett C.; Ren, Tong; Protasiewicz, John D. (Department of Chemistry, Case Western Reserve University, Cleveland, OH, 44106-7078, USA). European Journal of Inorganic Chemistry (11), 2779-2783 (English) 2002. CODEN: EJICFO. ISSN: 1434-1948. Publisher: Wiley-VCH Verlag GmbH & Co. KGaA.

L8 ANSWER 33 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **100-51-6** REGISTRY
CN Benzenemethanol (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzyl alcohol (8CI)
OTHER NAMES:
CN (Hydroxymethyl)benzene
CN .alpha.-Hydroxytoluene
CN .alpha.-Toluenol
CN Benzenecarbinol
CN Benzylic alcohol
CN Phenylcarbinol
CN Phenylmethanol
CN Phenylmethyl alcohol
CN Sunmorl BK 20
FS 3D CONCORD
DR 1336-27-2, 185532-71-2
MF C7 H8 O
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

18289 REFERENCES IN FILE CA (1962 TO DATE)
392 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
18336 REFERENCES IN FILE CAPLUS (1962 TO DATE)
7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:210436 Polarographic determination of benzaldehyde in

Searched by: Mary Hale 308-4258 CM-1 1E01

benzyl alcohol and sodium diclofenac injection formulations. Kazemifard, Amir G.; Moore, Douglas E.; Mohammadi, A. (College of Pharmacy, Medical Sciences University of Tehran, Tehran, Iran). Journal of Pharmaceutical and Biomedical Analysis, 30(2), 257-262 (English) 2002. CODEN: JPBADA. ISSN: 0731-7085. Publisher: Elsevier Science B.V..

REFERENCE 2: 138:210354 Antimicrobial and anti-inflammatory peptides. McNicol, Patricia J.; Pawlak, Sonia K.; Rubinchik, Evelina; Cameron, Dale; Guarna, Maria Marta (Micrologix Biotech Inc., Can.). PCT Int. Appl. WO 2003018619 A2 20030306, 66 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-CA1351 20020826. PRIORITY: US 2001-PV315003 20010824; US 2002-229368 20020826.

REFERENCE 3: 138:210315 Polyethylene glycol as solubilizing agent for drugs. Mitsuchika, Kozo; Sakagami, Kenji; Hashizume, Satoshi (Nof Corporation, Japan). Jpn. Kokai Tokkyo Koho JP 2003063998 A2 20030305, 7 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-257178 20010828.

REFERENCE 4: 138:210107 Rapid determination of liposome-water partition coefficients (Klw) using liposome electrokinetic chromatography (LEKC). Burns, Scott T.; Khaledi, Morteza G. (Department of Chemistry, North Carolina State University, Raleigh, NC, 27696-8204, USA). Journal of Pharmaceutical Sciences, 91(7), 1601-1612 (English) 2002. CODEN: JPMSAE. ISSN: 0022-3549. Publisher: Wiley-Liss, Inc..

REFERENCE 5: 138:209919 Semipermanent hair dye compositions containing phosphates, alcohols or carbonates, and direct dyes. Tsuge, Hitoshi; Sakura, Masaaki (Hoyu Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2003073239 A2 20030312, 7 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-260966 20010830.

REFERENCE 6: 138:206865 Preparation of vinyl ether compounds using transition metal compound catalysts. Ishii, Yasutaka; Nakano, Tatsuya; Inoue, Keizo (Daicel Chemical Industries, Ltd., Japan). Eur. Pat. Appl. EP 1288186 A2 20030305, 24 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK. (English). CODEN: EPXXDW. APPLICATION: EP 2002-19088 20020828. PRIORITY: JP 2001-261632 20010830.

REFERENCE 7: 138:206563 Epoxy resin-based coating composition containing polyhexamethyleneguanidine hydrochloride. Sukhareva, L. A.; Semenov, G. V.; Bakirova, E. V.; Yakovlev, V. S.; Gubanova, M. I. (Moskovckii Gosudarstvennyi Universitet Prikladnoi Biotekhnologii, Russia). Russ. RU 2180907 C2 20020327, No pp. given (Russian). CODEN: RUXXE7. APPLICATION: RU 1999-125027 19991124.

REFERENCE 8: 138:206082 Phenolic polymers and their manufacture and applications. Sone, Yoshihisa; Murata, Kiyotaka (Sumikin Air Water Chemical Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2003064164 A2 20030305, 14 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-257744 20010828.

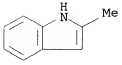
REFERENCE 9: 138:206051 Epoxy resin compositions and solid state devices

Searched by: Mary Hale 308-4258 CM-1 1E01

encapsulated therewith. Yeager, Gary William; Rubinsztajn, Malgorzata Iwona (General Electric Company, USA). Eur. Pat. Appl. EP 1285939 A1 20030226, 24 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK. (English). CODEN: EPXXDW. APPLICATION: EP 2002-255577 20020809. PRIORITY: US 2001-935369 20010823.

REFERENCE 10: 138:205264 Highly deoxygenated sugars. I. C2-branched glucose derivatives and carbon linked deoxygenated disaccharides. Krohn, Karsten; Florke, Ulrich; Gehle, Dietmar (Fachbereich Chemie und Chemietechnik, Universitat Paderborn, Paderborn, 33098, Germany). Journal of Carbohydrate Chemistry, 21(5), 431-443 (English) 2002. CODEN: JCACDM. ISSN: 0732-8303. Publisher: Marcel Dekker, Inc..

L8 ANSWER 34 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **95-20-5** REGISTRY
CN 1H-Indole, 2-methyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Indole, 2-methyl- (8CI)
OTHER NAMES:
CN 2-Methyl-1H-indole
CN 2-Methylindole
FS 3D CONCORD
MF C9 H9 N
CI COM
LC STN Files: ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, DETHERM*, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, NAPRALERT, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1183 REFERENCES IN FILE CA (1962 TO DATE)
8 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1184 REFERENCES IN FILE CAPLUS (1962 TO DATE)
25 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:170483 Scandium perchlorate as a superior Lewis acid for regioselective ring opening of aziridine carboxylate with indoles. Nishikawa, Toshio; Kajii, Shigeo; Wada, Kyoko; Ishikawa, Miyuki; Isobe, Minoru (Laboratory of Organic Chemistry, Graduate School of Bioagricultural Sciences, Nagoya University, Nagoya, 464-8601, Japan). Synthesis (12), 1658-1662 (English) 2002. CODEN: SYNTBF. ISSN: 0039-7881. Publisher: Georg Thieme Verlag.

REFERENCE 2: 138:169830 Convenient synthesis of .alpha.-trifluoromethyl amines via aminofluoroalkylation of arenes with N-trimethylsilyl .alpha.-trifluoroacetaldehyde hemiaminal. Gong, Yuefa; Kato, Katsuya

Searched by: Mary Hale 308-4258 CM-1 1E01

(National Institute of Advanced Industrial Science and Technology (AIST), Nagoya, 463-8560, Japan). Journal of Fluorine Chemistry, 116(2), 103-107 (English) 2002. CODEN: JFLCAR. ISSN: 0022-1139. Publisher: Elsevier Science B.V..

REFERENCE 3: 138:153549 Preparation of thieno[2,3-d]pyrimidinediones and their use in the modulation of autoimmune disease. Reynolds, Rachel Heulwen; Ingall, Anthony Howard; Rasul, Rukhsana Tasneem; Guile, Simon David; Cooper, Martin Edward (Astrazeneca AB, Swed.; Astrazeneca UK Limited). PCT Int. Appl. WO 2003011868 A1 20030213, 148 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-GB3399 20020724. PRIORITY: GB 2001-18479 20010728.

REFERENCE 4: 138:153504 Easy formation of SNH products in reactions of indoles and pyrroles with 3-aryl-1,2,4-triazin-5(2H)-ones in the presence of tosyl chloride. Zyryanov, G. V.; Rusinov, V. L.; Chupakhin, O. N. (Ural State Technical University, Yekaterinburg, 620002, Russia). Russian Chemical Bulletin (Translation of Izvestiya Akademii Nauk, Seriya Khimicheskaya), 51(6), 1042-1044 (English) 2002. CODEN: RCBUEY. ISSN: 1066-5285. Publisher: Kluwer Academic/Consultants Bureau.

REFERENCE 5: 138:153410 The Aminomethylation of Electron-Rich Aromatics with an N-Silyl-N,O-Acetal Catalyzed by a Metal Triflate-TMSCl System: Facile Synthesis of Aromatic Primary Amines, 1-Aryl-trichloroethylamines. Sakai, Norio; Hirasawa, Maki; Hamajima, Toshihiro; Konakahara, Takeo (Department of Pure and Applied Chemistry, Faculty of Science and Technology, Tokyo University of Science, Chiba, 278-8510, Japan). Journal of Organic Chemistry, 68(2), 483-488 (English) 2003. CODEN: JOCEAH. ISSN: 0022-3263. Publisher: American Chemical Society.

REFERENCE 6: 138:153114 Synthesis of 1-amino-2-methylindoline by Raschig process: parallel reactions, modeling, and optimization. Elkhatib, M.; Peyrot, L.; Metz, R.; Tenu, R.; Elomar, F.; Delalu, H. (Laboratoire Hydrazines et Procedes, FRE CNRS 2397, Universite Claude Bernard Lyon 1, Villeurbanne, F-69622, Fr.). International Journal of Chemical Kinetics, 34(10), 575-584 (English) 2002. CODEN: IJCKBO. ISSN: 0538-8066. Publisher: John Wiley & Sons, Inc..

REFERENCE 7: 138:122656 Preparation of thieno[2,3-d]pyrimidinediones as immunosuppressants for treatment of obstructive airway disease. Reynolds, Rachel Heulwen; Ingall, Anthony Howard (Astrazeneca Ab, Swed.; Astrazeneca Uk Limited). PCT Int. Appl. WO 2003008422 A1 20030130, 95 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-GB3250 20020716. PRIORITY: GB 2001-17583 20010719.

REFERENCE 8: 138:122515 InCl3-catalyzed alkylation of indoles with epoxides.

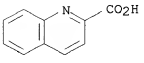
Searched by: Mary Hale 308-4258 CM-1 1E01

Yadav, J. S.; Reddy, B. V. S.; Abraham, Sunny; Sabitha, G. (Division of Organic Chemistry, Indian Institute of Chemical Technology, Hyderabad, 500 007, India). Synlett (9), 1550-1552 (English) 2002. CODEN: SYNLES. ISSN: 0936-5214. Publisher: Georg Thieme Verlag.

REFERENCE 9: 138:106601 Preparation of substituted anilinic piperidines as MCH selective antagonists. Marzabadi, Mohammad R.; Wetzel, John; Deleon, John E.; Jiang, Yu (Synaptic Pharmaceutical Corporation, USA). PCT Int. Appl. WO 2003004027 A1 20030116, 771 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-US21063 20020703. PRIORITY: US 2001-899794 20010705; US 2002-42582 20020109.

REFERENCE 10: 138:97248 Oxidation of simple indoles at a platinum anode. Keech, Peter G.; Chartrand, Michelle M. G.; Bunce, Nigel J. (Electrochemical Technology Centre, Department of Chemistry and Biochemistry, University of Guelph, Guelph, ON, N1G 2W1, Can.). Journal of Electroanalytical Chemistry, 534(1), 75-78 (English) 2002. CODEN: JECHES. Publisher: Elsevier Science B.V..

L8 ANSWER 35 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **93-10-7** REGISTRY
CN 2-Quinolinecarboxylic acid (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Quinaldic acid (8CI)
OTHER NAMES:
CN 2-Carboxyquinoline
CN 2-Quinolinylcarboxylic acid
CN Quinaldinic acid
FS 3D CONCORD
MF C10 H7 N O2
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, NAPRALERT, NIOSHTIC, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

692 REFERENCES IN FILE CA (1962 TO DATE)
27 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
692 REFERENCES IN FILE CAPLUS (1962 TO DATE)

Searched by: Mary Hale 308-4258 CM-1 1E01

7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:214424 Mixed ligand complexes of Rb and Cs metal salts of some organic acids with quinaldinic acid. Prakash, Dharm; Mehra, R. K.; Gupta, Anju K.; Yadav, Ashok Kumar (Department of Chemistry, Patna University, Patna, 800 005, India). Oriental Journal of Chemistry, 18(2), 347-350 (English) 2002. CODEN: OJCHEG. ISSN: 0970-020X. Publisher: Oriental Scientific Publishing Co..

REFERENCE 2: 138:214423 Mixed ligand complexes of rubidium and cesium metal salts of some organic acids with 1,10-phenanthroline. Prakash, Dharm; Gupta, Anju K.; Kumar, Surya; Yadav, Ashok Kumar (Department of Chemistry, Patna University, Patna, 800 005, India). Oriental Journal of Chemistry, 18(2), 335-338 (English) 2002. CODEN: OJCHEG. ISSN: 0970-020X. Publisher: Oriental Scientific Publishing Co..

REFERENCE 3: 138:205345 Preparation of cyclic amino acid compounds for inhibiting .beta.-amyloid peptide release and/or its synthesis. Audia, James E.; Dressman, Bruce A.; Shi, Qing (Elan Pharmaceuticals, Inc., USA; Eli Lilly & Company). U.S. US 6528505 B1 20030304, 70 pp., which (English). CODEN: USXXAM. APPLICATION: US 1999-338180 19990622. PRIORITY: US 1998-PV160067 19980622; US 1998-PV155238 19980930.

REFERENCE 4: 138:187649 Preparation of 1-sulfonyl quinoline derivatives as .gamma.-secretase inhibitors. Asberom, Theodros; Guzik, Henry S.; Josien, Hubert B.; Pissarnitski, Dmitri A. (Schering Corporation, USA). PCT Int. Appl. WO 2003014075 A2 20030220, 58 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UZ, VN, YU, ZA, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-US24323 20020801. PRIORITY: US 2001-PV310013 20010803; US 2002-PV355510 20020206.

REFERENCE 5: 138:170073 Preparation of N-[2-[3-[(4-aminomethyl)phenyl]propylamino]ethyl]amides as human .beta.-tryptase inhibitors for treatment of respiratory diseases, allergic diseases, inflammatory intestinal diseases, hyperprolliferative skin diseases, vascular edema, and rheumatoid arthritis. Kato, Yutaka; Miyazaki, Yutaka; Shimada, Hiroyasu; Manabe, Tadashi; Shiromizu, Ikuya; Okamoto, Atsushi (Mochida Pharmaceutical Co., Ltd., Japan). PCT Int. Appl. WO 2003011812 A1 20030213, 189 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (Japanese). CODEN: PIXXD2. APPLICATION: WO 2002-JP7843 20020801. PRIORITY: JP 2001-233818 20010801.

REFERENCE 6: 138:149962 Lytic reagent composition for determination of nucleated red blood cells. Li, Yi; Li, Jing (Coulter International Corp., USA). PCT Int. Appl. WO 2003012426 A1 20030213, 41 pp. DESIGNATED STATES: W: JP; RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR. (English). CODEN: PIXXD2. APPLICATION: WO

Searched by: Mary Hale 308-4258 CM-1 1E01

2002-US22414 20020715. PRIORITY: US 2001-917530 20010727.

REFERENCE 7: 138:107005 Preparation of amino acid prolinamide derivatives as protease inhibitors. Fenwick, Ashley E.; Gribble, Andrew D.; Marquis, Robert W., Jr.; Witherington, Jason (Smithkline Beecham Corporation, USA; Smithkline Beecham PLC). PCT Int. Appl. WO 9964399 A1 19991216, 48 pp. DESIGNATED STATES: W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CZ, EE, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZA; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1999-US13334 19990611. PRIORITY: US 1998-PV89056 19980612.

REFERENCE 8: 138:99409 Chemical mechanical polishing slurry for semiconductor integrated circuit, polishing method, and semiconductor integrated circuit. Tsugita, Katsuyuki; Shinmaru, Sachie (Seimi Chemical Co., Ltd., Japan). PCT Int. Appl. WO 2003005431 A1 20030116, 20 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (Japanese). CODEN: PIXXD2. APPLICATION: WO 2002-JP6590 20020628. PRIORITY: JP 2001-203716 20010704.

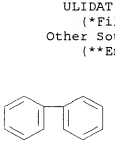
REFERENCE 9: 138:89815 Preparation of N-acyl-2-heterocyclyl substituted piperidines and analogs as orexin receptor antagonists. Chan, Wai Ngor; Johns, Amanda; Johnson, Christopher Norbert; Novelli, Riccardo; Porter, Roderick Alan (SmithKline Beecham P.L.C., UK). PCT Int. Appl. WO 2003002559 A2 20030109, 81 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-EP7007 20020625. PRIORITY: GB 2001-15862 20010628; GB 2001-30347 20011219.

REFERENCE 10: 138:89600 Synthesis and SAR of azalide 3,6-ketal aromatic derivatives as potent gram-positive and gram-negative antibacterial agents. Cheng, Hengmiao; Dirlam, John P.; Ziegler, Carl B.; Lundy, Kristin M.; Hayashi, Shigeru F.; Kamicker, Barbara J.; Dutra, Jason K.; Daniel, Kirsten L.; Santoro, Sheryl L.; George, David M.; Bertsche, Camilla D.; Sakya, Subas M.; Suarez-Contreras, Melani (Groton Laboratories, Pfizer Global Research and Development, Groton, CT, 06340, USA). Bioorganic & Medicinal Chemistry Letters, 12(17), 2431-2434 (English) 2002. CODEN: BMCLE8. ISSN: 0960-894X. Publisher: Elsevier Science Ltd..

L8 ANSWER 36 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **92-52-4** REGISTRY
CN 1,1'-Biphenyl (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Biphenyl (8CI)
OTHER NAMES:

Searched by: Mary Hale 308-4258 CM-1 1E01

CN 1,1'-Diphenyl
CN Bibenzene
CN Carolid AL
CN Diphenyl
CN Phenylbenzene
CN Tetrosin LY
FS 3D CONCORD
DR 56481-93-7, 72931-46-5
MF C12 H10
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*, DIPPR*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

30642 REFERENCES IN FILE CA (1962 TO DATE)
18863 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
30691 REFERENCES IN FILE CAPLUS (1962 TO DATE)
15 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:212655 A kinetic study on energy transfer between guest aromatic species and rare earth charge-compensating cations within zeolites. Hashimoto, Shuichi; Kirikae, Satsuki; Tobita, Seiji (Chemistry Department and Advanced Engineering Courses, Gunma College of Technology, Gunma, 371-8530, Japan). Physical Chemistry Chemical Physics, 4(23), 5856-5862 (English) 2002. CODEN: PPCPFQ. ISSN: 1463-9076. Publisher: Royal Society of Chemistry.

REFERENCE 2: 138:209833 Nanoscale particles and the treatment of chlorinated contaminants. Zhang, Wein-xian; Wang, Chuan-bao; Lien, Hsing-lung (USA). U.S. Pat. Appl. Publ. US 2003039857 A1 20030227, 11 pp., Cont. of U. S. Ser. No. 283,045, abandoned. (English). CODEN: USXXCO. APPLICATION: US 2001-821383 20010329. PRIORITY: US 1998-PV80373 19980401; US 1999-283045 19990401.

REFERENCE 3: 138:209763 Sediment-Water Distribution of Organic Contaminants in Aquatic Ecosystems: The Role of Organic Carbon Mineralization. Gobas, Frank A. P. C.; MacLean, Laura G. (School of Resource & Environmental Management, Simon Fraser University, Burnaby, BC, V5A 1S6, Can.). Environmental Science and Technology, 37(4), 735-741 (English) 2003. CODEN: ESTHAG. ISSN: 0013-936X. Publisher: American Chemical Society.

REFERENCE 4: 138:209720 Horizontal and vertical distribution of organic contaminants in deep-sea fish species. Mormede, Sophie; Davies, Ian M. (Marine Laboratory, Fisheries Research Services, Aberdeen, AB11 9DB, UK).

Searched by: Mary Hale 308-4258 CM-1 1E01

Chemosphere, Volume Date 2003, 50(4), 563-574 (English) 2002. CODEN: CMSHAF. ISSN: 0045-6535. Publisher: Elsevier Science Ltd..

REFERENCE 5: 138:209713 Concentrations and hazard assessment of PCBs, organochlorine pesticides and mercury in fish species from the Upper Thames: River pollution and its potential effects on top predators. Yamaguchi, N.; Gazzard, D.; Scholey, G.; Macdonald, D. W. (Wildlife Conservation Research Unit, Department of Zoology, Oxford, OX1 3PS, UK). Chemosphere, 50(3), 265-273 (English) 2002. CODEN: CMSHAF. ISSN: 0045-6535. Publisher: Elsevier Science Ltd..

REFERENCE 6: 138:209710 Determination of organohalogenated contaminants in liver of harbour porpoises (Phocoena phocoena) stranded on the Belgian North Sea coast. Covaci, A.; Van de Vijver, K.; DeCoen, W.; Das, K.; Bouquegneau, J. M.; Blust, R.; Schepens, P. (Toxicological Center, University of Antwerp, Wilrijk, 2610, Belg.). Marine Pollution Bulletin, 44(10), 1157-1165 (English) 2002. CODEN: MPNBAZ. ISSN: 0025-326X. Publisher: Elsevier Science Ltd..

REFERENCE 7: 138:209625 Method and device for removal of electric insulation based on polychlorobiphenyl from a transformer. Gusarov, E. E.; Ovchinnikov, A. N.; Ovchinnikov, K. A. (AOZT "NPO Petrokhim-Tekhnologiya", Russia). Russ. RU 2187858 C1 20020820, No pp. given (Russian). CODEN: RUXXE7. APPLICATION: RU 2000-129383 20001116.

REFERENCE 8: 138:209587 Removal of PCB by decomposition in supercritical condition. Nishimoto, Eiji (NTRK K. K., Japan). Jpn. Kokai Tokkyo Koho JP 2003062537 A2 20030304, 4 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-252954 20010823.

REFERENCE 9: 138:209549 Evaluation of the phytotoxicity of contaminated sediments deposited "on soil". I. Impact of water draining from the deposit on the germination of neighboring plants. Bedell, Jean-Philippe; Briant, Annelise; Delolme, Cecile; Perrodin, Yves (Laboratoire des Sciences de l'Environnement, Ecole Nationale des Travaux Publics de l'Etat, Vaulx-en-Velin, 69518, Fr.). Chemosphere, 50(3), 393-402 (English) 2002. CODEN: CMSHAF. ISSN: 0045-6535. Publisher: Elsevier Science Ltd..

REFERENCE 10: 138:209518 Reductive dechlorination of polychlorinated biphenyls in landfill leachate. Royal, Carmen L.; Preston, David R.; Sekelsky, Andrew M.; Shreve, Gina S. (Department of Chemical Engineering and Materials Science, Wayne State University, Detroit, MI, 48202, USA). International Biodeterioration & Biodegradation, Volume Date 2003, 51(1), 61-66 (English) 2002. CODEN: IBBIES. ISSN: 0964-8305. Publisher: Elsevier Science Ltd..

L8 ANSWER 37 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **91-63-4** REGISTRY
CN Quinoline, 2-methyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Quinaldine (8CI)
OTHER NAMES:
CN 2-Methylquinoline
CN Khinaldin
FS 3D CONCORD
MF C10 H9 N
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS,

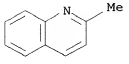
Searched by: Mary Hale 308-4258 CM-1 1E01

CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIPPR*, DRUGU, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USPAT2, USPATFULL

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1542 REFERENCES IN FILE CA (1962 TO DATE)
33 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1543 REFERENCES IN FILE CAPLUS (1962 TO DATE)
15 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:146688 Preparation of heterocycle-containing phosphines and corresponding palladium complexes and use thereof in palladium catalyzed coupling reactions. Edwards, Peter Gerald; Fallis, Ian Andrew; Yong, Ben Stuart (Johnson Matthey Public Limited Company, UK). Brit. UK Pat. Appl. GB 2378182 A1 20030205, 25 pp. (English). CODEN: BAXXDU. APPLICATION: GB 2001-18612 20010731.

REFERENCE 2: 138:137184 Synthesis and spectroscopic characterization of N-alkyl quaternary ammonium salts, typical precursors of cyanines. Pardal, A. C.; Ramos, S. S.; Santos, P. F.; Reis, L. V.; Almeida, P. (Departamento de Quimica, Universidade de Tras-os-Montes e Alto Douro, Vila Real Codex, 5001-911, Port.). Molecules [online computer file], 7(3), 320-330 (English) 2002. CODEN: MOLEFW. ISSN: 1420-3049. URL: http://www.mdpi.org/molecules/papers/70300320-pdf Publisher: Molecular Diversity Preservation International.

REFERENCE 3: 138:130324 Automated storage of gas chromatography-mass spectrometry data in a relational database to facilitate compound screening and identification. Staeb, J. A.; Epema, O. J.; van Duijn, P.; Steevens, J.; Klap, V. A.; Freriks, I. L. (Institute for Inland Water Management and Waste Water Treatment, RIZA, Lelystad, 8200 AA, Neth.). Journal of Chromatography, A, 974(1-2), 223-230 (English) 2002. CODEN: JCRAEY. ISSN: 0021-9673. Publisher: Elsevier Science B.V..

REFERENCE 4: 138:106589 Preparation of quinolines substituted at the 2- or 3-position by an alkenyl or alkynyl chain. Fakhfakh, Mohamed A.; Franck, Xavier; Fournet, Alian; Hocquemiller, Reynald; Figadere, Bruno (Laboratoire de Pharmacognosie, associe au CNRS (BIOCIS), Universite Paris-Sud, Faculte de Pharmacie, Chatenay-Malabry, F-92296, Fr.). Synthetic Communications, 32(18), 2863-2875 (English) 2002. CODEN: SYNCAV. ISSN: 0039-7911. Publisher: Marcel Dekker, Inc..

REFERENCE 5: 138:91388 Absorption spectra, aggregation and photofading behaviour of near-infrared absorbing squarylium dyes containing perimidine moiety. Kim, Sung-Hoon; Kim, Jae-Hong; Cui, Jian-Zhong; Gal, Yeong-Soon; Jin, Sung-Ho; Koh, Kwangnak (Department of Dyeing and Finishing, Kyungpook National University, Taegu, 702-701, S. Korea). Dyes and Pigments, 55(1),

1-7 (English) 2002. CODEN: DYPIDX. ISSN: 0143-7208. Publisher: Elsevier Science Ltd..

REFERENCE 6: 138:89680 Role of Pyridine Hydrogen-Bonding Sites in Recognition of Basic Amino Acid Side Chains. Bell, Thomas W.; Khasanov, Alisher B.; Drew, Michael G. B. (Department of Chemistry/216, University of Nevada, Reno, NV, 89557-0020, USA). Journal of the American Chemical Society, 124(47), 14092-14103 (English) 2002. CODEN: JACSAT. ISSN: 0002-7863. Publisher: American Chemical Society.

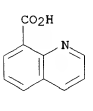
REFERENCE 7: 138:57463 The spectral and thermal properties of styrylquinolium salts for disc-recordable dyes. Song, Dong Hyun; Kim, Jae Pil; Lee, Chul Joo; Park, Ki Hong (Electronic Materials and Devices Research Center, Korea Institute of Science and Technology, Seoul, 136-791, S. Korea). Journal of Photoscience, 8(3-4), 113-117 (English) 2001. CODEN: JOPHFS. ISSN: 1225-8555. Publisher: Korean Society of Photoscience.

REFERENCE 8: 138:55879 Preparation of quinolines and quinolones and their use as cell adhesion inhibitors and cytokine formation inhibitors. Sato, Susumu; Aitani, Kiyoko; Kumakura, Seiichiro (Sankyo Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002371078 A2 20021226, 64 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-176693 20010612.

REFERENCE 9: 138:40705 Synthesis and visible spectral behaviour of some new N-bridgehead heterocyclic cyanine dyes incorporating pyrazolo (4,5-b) indolizine (benzoindolizine). Koraiem, A. I. M.; Abd El-Aal, R. M.; Mohammed, N. S. (Chemistry Department, Aswan Faculty of Science, South Valley University, Aswan, Egypt). Journal of the Chinese Chemical Society (Taipei, Taiwan), 49(4), 571-580 (English) 2002. CODEN: JCCTAC. ISSN: 0009-4536. Publisher: Chinese Chemical Society.

REFERENCE 10: 137:387086 Quinophthalone dye-sensitized solar cell. Ikeda, Masaaki; Shigaki, Koichiro; Inoue, Teruhisa (Nippon Kayaku Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002334729 A2 20021122, 17 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2002-57108 20020304. PRIORITY: JP 2001-66891 20010309.

L8 ANSWER 38 OF 38 REGISTRY COPYRIGHT 2003 ACS
RN **86-59-9** REGISTRY
CN 8-Quinolinecarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 8-Carboxyquinoline
FS 3D CONCORD
MF C10 H7 N O2
CI COM
LC STN Files: ANABSTR, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CSCHEM, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, MRCK*, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)



Searched by: Mary Hale 308-4258 CM-1 1E01

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

134 REFERENCES IN FILE CA (1962 TO DATE)
5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
134 REFERENCES IN FILE CAPLUS (1962 TO DATE)
14 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:153556 Method for preparing heteroarylcarboxylic acids via treatment of the corresponding hydroxymethyl compounds with oxygen in the presence of a transition metal catalyst.. Burdeniuc, Juan Jesus (Air Products and Chemicals, Inc., USA). Eur. Pat. Appl. EP 1283202 A1 20030212, 17 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK. (English). CODEN: EPXXDW. APPLICATION: EP 2002-17635 20020806. PRIORITY: US 2001-925239 20010809.

REFERENCE 2: 138:106718 preparation of quinoxalinecarboxylic acids and related compounds via oxidation of halomethyl derivs. using oxygen and a transition metal catalyst.. Burdeniuc, Juan Jesus (Air Products and Chemicals, Inc., USA). Eur. Pat. Appl. EP 1277739 A1 20030122, 15 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK. (English). CODEN: EPXXDW. APPLICATION: EP 2002-15662 20020717. PRIORITY: US 2001-908997 20010719.

REFERENCE 3: 138:89803 Preparation of aroylazoles and aroylazines as orexin receptor antagonists. Branch, Clive Leslie; Chan, Wai Ngor; Johns, Amanda; Johnson, Christopher Norbert; Nash, David John; Novelli, Riccardo; Pilleux, Jean-Pierre; Porter, Roderick Alan; Stead, Rachel Elizabeth Anne; Stemp, Geoffrey (SmithKline Beecham P.L.C., UK). PCT Int. Appl. WO 2003002561 A1 20030109, 74 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-EP7009 20020625. PRIORITY: GB 2001-15863 20010628; GB 2001-30342 20011219.

REFERENCE 4: 137:370356 Preparation and use of bombesin receptor antagonists for treatment of sexual dysfunction in males and females. Gonzalez, Maria Isabel; Higginbottom, Michael; Stock, Herman Thijs; Pritchard, Martyn Clive; Pinnock, Robert Denham; Van der Graaf, Pieter Hadewijn; Naylor, Alisdair Mark; Wayman, Christopher Peter (UK). U.S. Pat. Appl. Publ. US 2002169101 A1 20021114, 105 pp., Cont.-in-part of U.S. Pat. Appl. 2002 58,606. (English). CODEN: USXXCO. APPLICATION: US 2001-999284 20011115. PRIORITY: US 1999-PV133355 19990510; WO 2000-GB1787 20000510; US 2000-700165 20001109; US 2001-759777 20010112; GB 2001-9910 20010423; GB 2001-11037 20010504.

REFERENCE 5: 137:154705 Preparation of adamantanols using catalysts containing imides and nitrogen oxides. Ishii, Yasutaka; Nakano, Tatsuya; Tatsumi, Atsuo (Daicel Chemical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002226404 A2 20020814, 18 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-70781 20010313. PRIORITY: JP 2000-361973 20001128.

REFERENCE 6: 137:140338 Preparation of aminoethanol derivatives as

cholesteryl ester transfer protein inhibitors for treatment of hyperlipidemia, etc.. Kori, Masakuni; Hamamura, Kazumasa; Fuse, Hiromitsu; Yamamoto, Toshihiro (Takeda Chemical Industries, Ltd., Japan). PCT Int. Appl. WO 2002059077 A1 20020801, 748 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (Japanese). CODEN: PIXXD2. APPLICATION: WO 2002-JP532 20020125. PRIORITY: JP 2001-19280 20010126.

REFERENCE 7: 137:93771 Preparation of piperazinocarbonyl(iso)quinolines as 5-HT2A receptor antagonists. Boettcher, Henning; Bartoszyk, Gerd; Harting, Juergen; Van Amsterdam, Christoph; Seyfried, Christoph (Merck Patent G.m.b.H., Germany). Ger. Offen. DE 10102053 A1 20020718, 10 pp. (German). CODEN: GWXXBX. APPLICATION: DE 2001-10102053 20010117.

REFERENCE 8: 137:6075 Remarkable effect of nitrogen dioxide for N-hydroxyphthalimide-catalyzed aerobic oxidation of methylquinolines. Sakaguchi, Satoshi; Shibamoto, Akihiro; Ishii, Yasutaka (Department of Applied Chemistry, Faculty of Engineering, Kansai University, Suita, Osaka, 564-8680, Japan). Chemical Communications (Cambridge, United Kingdom) (2), 180-181 (English) 2002. CODEN: CHCOFS. ISSN: 1359-7345. Publisher: Royal Society of Chemistry.

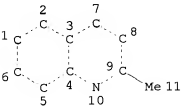
REFERENCE 9: 136:402022 Preparation of (S)-.alpha.-methyltryptophan amide derivatives as bombesin receptor antagonists. Higginbottom, Michael; Pritchard, Martin Clive; Stock, Herman Thijs (Warner-Lambert Company, USA). PCT Int. Appl. WO 2002040469 A1 20020523, 85 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-EP14401 20011116. PRIORITY: GB 2000-28104 20001117.

REFERENCE 10: 136:395983 Bombesin receptor antagonists, and combinations with other agents, for the treatment of sexual dysfunction. Gonzalez, Maria Isabel; Stock, Herman Thijs; Pinnock, Robert Denham; Pritchard, Martyn Clive; Wayman, Christopher Peter; Van der Graaf, Pieter Hadewijn; Naylor, Alisdair Mark; Higginbottom, Michael (Warner-Lambert Company, USA). PCT Int. Appl. WO 2002040008 A2 20020523, 225 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-GB5018 20011114. PRIORITY: WO 2000-GB4380 20001117; GB 2001-9910 20010423; GB 2001-11037 20010504.

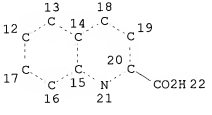
Searched by: Mary Hale 308-4258 CM-1 1E01

file reg

```
=> d l13 que stat;d l14 que stat
L9                  STR
```




```
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  11

STEREO ATTRIBUTES: NONE
L13        26829 SEA FILE=REGISTRY SSS FUL L9

100.0% PROCESSED 122289 ITERATIONS                    26829 ANSWERS
SEARCH TIME: 00.00.01



L10                 STR
```




```
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  11

STEREO ATTRIBUTES: NONE
L14         1497 SEA FILE=REGISTRY SSS FUL L10

100.0% PROCESSED    3460 ITERATIONS                   1497 ANSWERS
SEARCH TIME: 00.00.01


=> fil caplus;s l14 and l13
COST IN U.S. DOLLARS                        SINCE FILE      TOTAL
                                               ENTRY    SESSION
FULL ESTIMATED COST                            397.02     632.78

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)  SINCE FILE      TOTAL


Searched by: Mary Hale 308-4258 CM-1 1E01
```

	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-18.17

FILE 'CAPLUS' ENTERED AT 13:56:36 ON 03 APR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 3 Apr 2003 VOL 138 ISS 14
FILE LAST UPDATED: 2 Apr 2003 (20030402/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
          3108 L14
          9370 L13
L15        234 L14 AND L13

=> s l15 and (cunningham? or alternar? or absid? or aspergill? or giomerell? or
penicill?)
          1646 CUNNINGHAM?
          5433 ALTERNAR?
           739 ABSID?
         42177 ASPERGILL?
             0 GIOMERELL?
         62405 PENICILL?
L16          6 L15 AND (CUNNINGHAM? OR ALTERNAR? OR ABSID? OR ASPERGILL? OR
               GIOMERELL? OR PENICILL?)

=> s l15 and pseudomon?
         64283 PSEUDOMON?
L17          2 L15 AND PSEUDOMON?

=> s l16 or l17
L18          7 L16 OR L17

=> d 1-7 cbib abs hitstr

L18  ANSWER 1 OF 7  CAPLUS  COPYRIGHT 2003 ACS
2002:294175   Document No. 136:308633  Microbial conversion of bicyclic
     heteroaromatic compounds.  Cawley, James J.; Wong, John W. (USA).  U.S.
     Pat. Appl. Publ. US 20020045225 A1 20020418, 14 pp.  (English).  CODEN:
     USXXCO.  APPLICATION: US 2001-924292 20010808.  PRIORITY: US 2000-PV224089
     20000809.
AB   The present invention relates to processes for the microbial oxidn. of
     bicyclic heteroarom. compds. which comprise contacting these compds. with
     a microorganism, or a suitable mutant thereof, and incubating the
```

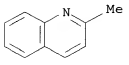
Searched by: Mary Hale 308-4258 CM-1 1E01

resulting mixt. under conditions sufficient to yield an amt. of their resp. carboxylic acids. The present processes optionally further comprise the isolation and purifn. of the product carboxylic acids. Thus, **Pseudomonas** putida ATCC 33015 converted 3-methylquinoline to 3-quinolinecarboxylic acid with a yield of 9%.

IT **91-63-4**
RL: BCP (Biochemical process); RCT (Reactant); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent)
(microbial oxidn. of bicyclic heteroarom. compds.)

RN 91-63-4 CAPLUS

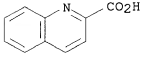
CN Quinoline, 2-methyl- (9CI) (CA INDEX NAME)



IT **93-10-7P**, 2-Quinolinecarboxylic acid
RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)
(microbial oxidn. of bicyclic heteroarom. compds.)

RN 93-10-7 CAPLUS

CN 2-Quinolinecarboxylic acid (9CI) (CA INDEX NAME)

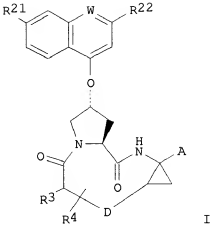


L18 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2003 ACS

2000:725652 Document No. 133:296659 Preparation of macrocyclic peptides active against the hepatitis C virus. Tsantrizos, Youla S.; Cameron, Dale R.; Faucher, Anne-marie; Ghiro, Elise; Goudreau, Nathalie; Halmos, Teddy; Llinas-brunet, Montse (Boehringer Ingelheim (Canada) Ltd., Can.). PCT Int. Appl. WO 2000059929 A1 20001012, 154 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 2000-CA353 20000403. PRIORITY: US 1999-PV128011 19990406.

GI

Searched by: Mary Hale 308-4258 CM-1 1E01



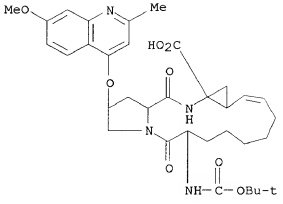
I

AB Macrocyclic peptides I [W = CH or N; R21 = H, halo, alkyl, cycloalkyl, haloalkyl, alkoxy, cycloalkoxy, hydroxy, or an amino group; R22 = H, halo, alkyl, cycloalkyl, haloalkyl, thioalkyl, alkoxy, cycloalkoxy, alkoxyalkyl, cycloalkyl, aryl or heteroaryl; R3 = hydroxy, NH2, aryl- or heteroarylamino, NHCOR32, CONHR32, CO2R32, where R32 is alkyl or cycloalkyl; D is a 5 to 10-atom satd. or unsatd. alkylene chain optionally contg. one to three heteroatoms independently selected from: O, S, or NH or substituted imino; R4 = H or from one to three substituents at any carbon atom of chain D; A is an amide or carboxylic acid group or a pharmaceutically acceptable salt or ester; two diastereomers may exist at the cyclopropane moiety] were prepd. which are active in-vitro and in cellular assays against the NS3 protease of the hepatitis C virus . Thus, macrocyclic peptide I [W = N; R21, R22, R4 = H; A = CO2H; R3CH-D = (S)-(Me3CO2CNH)CH(CH2)3CH:CH(CH2)2-E (syn to acid)] was prepd. and showed IC50 > 0.1 .mu.M in the full-length NS3-NS4A heterodimer protein fluorogenic assay.

IT **300832-50-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of macrocyclic peptides active against the hepatitis C virus)

RN 300832-50-2 CAPLUS

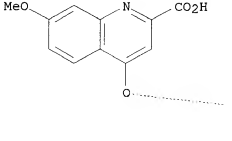
CN Cyclopropa[e]pyrrolo[1,2-a][1,4]diazacyclopentadecine-14a(5H)-carboxylic acid, 6-[[(1,1-dimethylethoxy)carbonyl]amino]-1,2,3,6,7,8,9,10,11,13a,14,15,16,16a-tetradecahydro-2-[(7-methoxy-2-methyl-4-quinolinyl)oxy]-5,16-dioxo-, (2R,6S,12Z,13aS,14aR,16aS)- (9CI) (CA INDEX NAME)



IT **300831-75-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of macrocyclic peptides active against the hepatitis C virus)
RN 300831-75-8 CAPLUS
CN Cyclopropa[e]pyrrolo[1,2-a][1,4]diazacyclopentadecine-14a(5H)-carboxylic acid, 2-[(2-carboxy-7-methoxy-4-quinolinyl)oxy]-6-[[(cyclopentyloxy)carbonyl]amino]-1,2,3,6,7,8,9,10,11,13a,14,15,16,16a-tetradecahydro-5,16-dioxo-, 14a-methyl ester, monosodium salt, (2R,6S,12Z,13aS,14aR,16aS)- (9CI) (CA INDEX NAME)

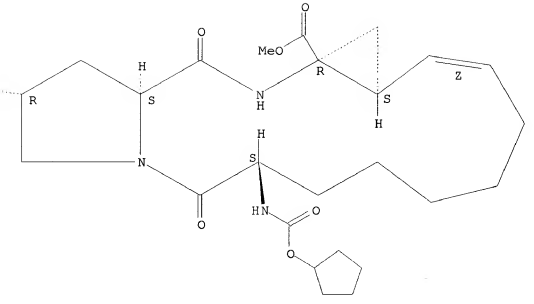
Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



Searched by: Mary Hale 308-4258 CM-1 1E01

PAGE 1-B



PAGE 2-A

● Na

L18 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2003 ACS
1992:400277 Document No. 117:277 Mechanism of allergic cross-reactions. I. Multispecific binding of ligands to a mouse monoclonal anti-DNP IgE antibody. Varga, Janos M.; Kalchschmid, Gertrud; Klein, Georg F.; Fritsch, Peter (Dep. Dermatol., Univ. Innsbruck, Innsbruck, 6020, Austria). Molecular Immunology, 28(6), 641-54 (English) 1991. CODEN: MOIMD5. ISSN: 0161-5890.

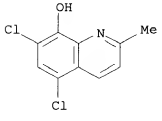
AB A recently developed solid-phase binding assay was used to investigate the specificity of ligand binding to a mouse monoclonal anti-dinitrophenyl IgE (I). All DNP-amino acids, that were tested inhibited the binding of the radio-labeled I to DNP covalently attached to polystyrene microplates; however, the concn. for 50% inhibition varied within four orders of magnitude, DNP-L-serine being the most and DNP-L-proline the least potent inhibitor. In addn. to DNP analogs, a large no. of drugs and other compds. were tested for their ability to compete with DNP for the binding site of I. At the concn. used for screening, 59% of compds. had no significant inhibition; 19% inhibited the binding of I more than 50%. Several families of compds. (tetracyclines, polymyxins, phenothiazines, salicylates, and quinones) that were effective competitors were found. Within these families, changes in the functional groups attached to the family stem had major effects on the affinity of ligand binding. The occurrence frequencies of interactions of ligands with I is in good agreement with the semi-empirical model for multispecific antibody-ligand interactions.

IT **72-80-0**, Sterosan **484-11-7**, Neocuproin **522-51-0** **877-43-0**, 2,6-Dimethylquinoline **3811-56-1**, Surfen

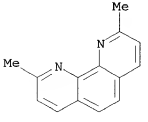
Searched by: Mary Hale 308-4258 CM-1 1E01

RL: BIOL (Biological study)
(binding of, to anti-dinitrophenol monoclonal antibody, allergic cross-reaction mechanism in relation to)

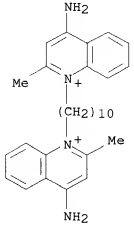
RN 72-80-0 CAPLUS
CN 8-Quinolinol, 5,7-dichloro-2-methyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



RN 484-11-7 CAPLUS
CN 1,10-Phenanthroline, 2,9-dimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



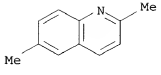
RN 522-51-0 CAPLUS
CN Quinolinium, 1,1'-(1,10-decanediyl)bis[4-amino-2-methyl-, dichloride (9CI) (CA INDEX NAME)



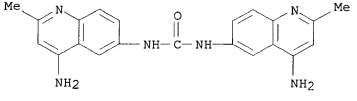
●2 Cl⁻

RN 877-43-0 CAPLUS
CN Quinoline, 2,6-dimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

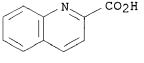
Searched by: Mary Hale 308-4258 CM-1 1E01



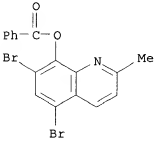
RN 3811-56-1 CAPLUS
CN Urea, N,N'-bis(4-amino-2-methyl-6-quinolinyl)- (9CI) (CA INDEX NAME)



IT **93-10-7**, Quinaldinic acid **3684-46-6**
RL: BIOL (Biological study)
(binding of, to anti-dinitrophenol monoclonal antibody, allergic cross-reaction mechanisms in relation to)
RN 93-10-7 CAPLUS
CN 2-Quinolinecarboxylic acid (9CI) (CA INDEX NAME)



RN 3684-46-6 CAPLUS
CN 8-Quinolinol, 5,7-dibromo-2-methyl-, benzoate (ester) (8CI, 9CI) (CA INDEX NAME)



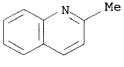
L18 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2003 ACS
1990:173827 Document No. 112:173827 The structural basis of the mutagenicity of chemicals in Salmonella typhimurium: The Gene-Tox data base. Klopman, Gilles; Frierson, Manton R.; Rosenkranz, Herbert S. (Dep. Chem., Case West. Reserve Univ., Cleveland, OH, 44106, USA). Mutation Research, 228(1), 1-50 (English) 1990. CODEN: MUREAV. ISSN: 0027-5107.
AB The CASE (Computer Automated Structure Evaluation) structure-activity

Searched by: Mary Hale 308-4258 CM-1 1E01

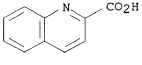
methodol. has been applied to a Gene-Tox derived Salmonella mutagenicity data base consisting of 808 chems. Based upon qual. structural features, CASE identified 29 activating and 3 inactivating structural determinants which correctly predicted the probability of carcinogenicity of 93.7% of the known mutagens and nonmutagens in the data base (sensitivity = 0.998, and specificity = 0.704). Addnl., based upon a qual. structure-activity anal., CASE's performance was even better, leading to a sensitivity of 0.981 and a specificity of 1.000. Using the structural determinants identified in this data base, CASE gave excellent predictions of the mutagenicity of chems. not included in the data base. The identified biophores and biophobes can also be used to investigate the structural basis of the mutagenicity of various chem. classes.

IT **91-63-4**, Quinaldine **93-10-7**, Quinaldic acid
525-47-3, 5-Nitroquinaldic acid **826-81-3**,
8-Hydroxy-2-methylquinoline **881-07-2**, 8-Nitroquinaldine
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(mutagenicity of, Computer Automated Structure Evaluation for study of structural determinants in relation to)

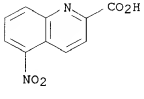
RN 91-63-4 CAPLUS
CN Quinoline, 2-methyl- (9CI) (CA INDEX NAME)



RN 93-10-7 CAPLUS
CN 2-Quinolinecarboxylic acid (9CI) (CA INDEX NAME)

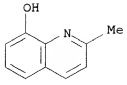


RN 525-47-3 CAPLUS
CN 2-Quinolinecarboxylic acid, 5-nitro- (9CI) (CA INDEX NAME)

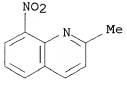


RN 826-81-3 CAPLUS
CN 8-Quinolinol, 2-methyl- (8CI, 9CI) (CA INDEX NAME)

Searched by: Mary Hale 308-4258 CM-1 1E01

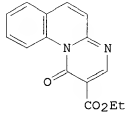


RN 881-07-2 CAPLUS
CN Quinoline, 2-methyl-8-nitro- (9CI) (CA INDEX NAME)

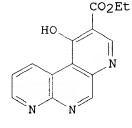


L18 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2003 ACS
1979:103866 Document No. 90:103866 Syntheses of nitrogen-containing heterocyclic compounds. XXXII. On the antimicrobial activity of diazaphenanthrenes and syntheses of triazaphenanthrenes related to nalidixic acid. Takeuchi, Isao; Ozawa, Isao; Ogaki, Toshiro; Hamada, Yoshiki; Ito, Tomiyoshi (Fac. Pharm., Meijo Univ., Nagoya, Japan). Yakugaku Zasshi, 98(9), 1279-85 (Japanese) 1978. CODEN: YKKZAJ. ISSN: 0031-6903.

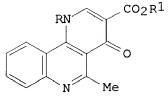
GI



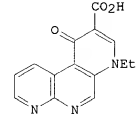
I



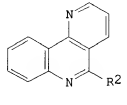
II



V, R=Me, R^1=H
VI, R=R^1=Et



VII



VIII, R^2=Me
IX, R^2=CHO
X, R^2=CO_2H

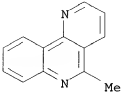
Searched by: Mary Hale 308-4258 CM-1 1E01

AB 2-Aminoquinoline and 3-amino-1,8-naphthyridine cyclized with EtOCH:C(CO2Et)2 to give pyrimidoquinoline I and triazaphenanthrene II, resp. Hydrolysis of I gave 2-aminoquinoline, whereas Et 4-hydroxy-5-methyl-1,6-phenanthroline-3-carboxylate and II gave 4-hydroxy-5-methyl-1,6-phenanthroline-3-carboxylic acid (III) and 4-hydroxy-1,8,9,-triazaphenanthrene-2-carboxylic acid (IV), resp. N-Alkylation of III, the Et ester of III, and IV gave V, VI, and VII, resp. Methylphenanthroline (VIII) was oxidized with SeO2 to give IX, which was oxidized with H2O2 to give X. Bactericidal testing of the prepd. compds. and diazaphenanthrenes showed that these compds. had antibacterial activity against **Pseudomonas** aeruginosa.

IT **34016-27-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(bactericidal activity and oxidn. of, aldehyde from)

RN 34016-27-8 CAPLUS

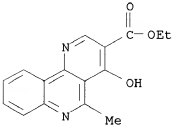
CN Benzo[h]-1,6-naphthyridine, 5-methyl- (8CI, 9CI) (CA INDEX NAME)



IT **69164-17-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(hydrolysis and N-alkylation of)

RN 69164-17-6 CAPLUS

CN Benzo[h]-1,6-naphthyridine-3-carboxylic acid, 4-hydroxy-5-methyl-, ethyl ester (9CI) (CA INDEX NAME)

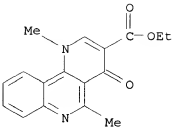


IT **69164-19-8P 69164-20-1P 69164-21-2P**
69164-22-3P 69164-28-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and bactericidal activity of)

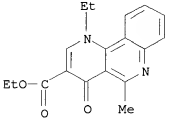
RN 69164-19-8 CAPLUS

CN Benzo[h]-1,6-naphthyridine-3-carboxylic acid, 1,4-dihydro-1,5-dimethyl-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)

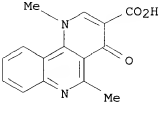
Searched by: Mary Hale 308-4258 CM-1 1E01



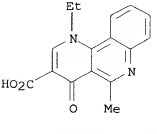
RN 69164-20-1 CAPLUS
CN Benzo[h]-1,6-naphthyridine-3-carboxylic acid, 1-ethyl-1,4-dihydro-5-methyl-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)



RN 69164-21-2 CAPLUS
CN Benzo[h]-1,6-naphthyridine-3-carboxylic acid, 1,4-dihydro-1,5-dimethyl-4-oxo- (9CI) (CA INDEX NAME)

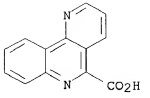


RN 69164-22-3 CAPLUS
CN Benzo[h]-1,6-naphthyridine-3-carboxylic acid, 1-ethyl-1,4-dihydro-5-methyl-4-oxo- (9CI) (CA INDEX NAME)

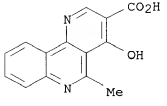


RN 69164-28-9 CAPLUS
CN Benzo[h]-1,6-naphthyridine-5-carboxylic acid (9CI) (CA INDEX NAME)

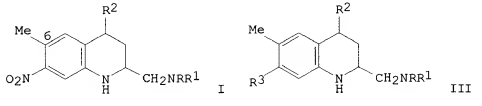
Searched by: Mary Hale 308-4258 CM-1 1E01



IT **69164-18-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn., N-alkylation, and bactericidal activity of)
RN 69164-18-7 CAPLUS
CN Benzo[h]-1,6-naphthyridine-3-carboxylic acid, 4-hydroxy-5-methyl- (9CI) (CA INDEX NAME)



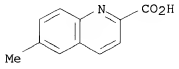
L18 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2003 ACS
1976:432869 Document No. 85:32869 2-Aminoalkyl tetrahydroquinolines.
Richards, Hugh Colin (Pfizer Inc., USA). U.S. US 3929784 19751230, 35 pp. (English). CODEN: USXXAM. APPLICATION: US 1974-451980 19740318.
GI



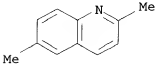
AB The title compds. I [R,R1 = H, alkyl, cycloalkyl; RR1 = CH2CH2OCH2CH2, (CH2)4; R2 = H, Me], useful in the treatment of schistosoma in mice at 50 mg/kg i.p., were prepd. Thus, 6-methyl-2-quinolinecarboxylic acid underwent successive acyl chlorination, amidation with Et2NH, LiAlH4 redn., hydrogenation in the presence of Raney Ni, and nitration to give I (R = R1 = Et; R2 = H). Alternately, I were prepd. via substitution reactions of 2-(chloromethyl)quinolines with RR1NH or via reductive amination of 2-formylquinolines with RR1NH. The C-6 hydroxymethyl analogs (II) of I were obtained by incubation of I with **Aspergillus** sclerotiorum Huber, and the tetrahydroquinolines III (R3 = CN, Br) were prepd. from I via redn. of the nitro group and Sandmeyer reactions of the resultant 7-aminotetrahydroquinolines. III (R3 = Cl) were prepd. via substitution reactions of 7-chloro-6-methyl-2-(halomethyl)quinolines, and III (R3 = F) via reductive amination of 7-fluoro-2-formylquinolines II and III were antischistosomal agents.

Searched by: Mary Hale 308-4258 CM-1 1E01

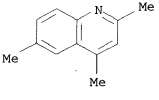
IT **15733-84-3**
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylchlorination-amination of)
RN 15733-84-3 CAPLUS
CN 2-Quinolinecarboxylic acid, 6-methyl- (9CI) (CA INDEX NAME)



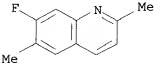
IT **877-43-0 2243-89-2 53425-96-0**
RL: RCT (Reactant); RACT (Reactant or reagent)
(chlorination of)
RN 877-43-0 CAPLUS
CN Quinoline, 2,6-dimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



RN 2243-89-2 CAPLUS
CN Quinoline, 2,4,6-trimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 53425-96-0 CAPLUS
CN Quinoline, 7-fluoro-2,6-dimethyl- (9CI) (CA INDEX NAME)



L18 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2003 ACS
1961:98894 Document No. 55:98894 Original Reference No. 55:18552e-g
Supplementary data for the paper-chromatographic separation and identification of phenol derivatives and related compounds of biochemical interest, with a "reference system". Reio, L. (Univ. Stockholm). J. Chromatog., 4, 458-76 (Unavailable) 1960.
AB cf. CA 53, 3349g. Rf values in 6 different solvent systems and corresponding color reactions produced by 10 standard reagents are

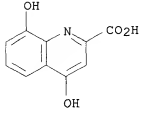
Searched by: Mary Hale 308-4258 CM-1 1E01

tabulated for about 270 mono-, di-, and trihydric phenol derivs., hippuric acid derivs., alkaloids, hydroxylated quinolines, pyridines, and antibiotics of biochem. interest. The data are useful for both sepn. and analysis of these materials.

IT **59-00-7,** Xanthurenic acid **607-67-0,** 4-Quinolinol, 2-methyl- **826-81-3,** 8-Quinolinol, 2-methyl-
(chromatography of)

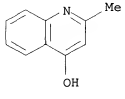
RN 59-00-7 CAPLUS

CN 2-Quinolinecarboxylic acid, 4,8-dihydroxy- (9CI) (CA INDEX NAME)



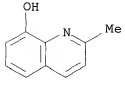
RN 607-67-0 CAPLUS

CN 4-Quinolinol, 2-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 826-81-3 CAPLUS

CN 8-Quinolinol, 2-methyl- (8CI, 9CI) (CA INDEX NAME)



=> dis his

(FILE 'HOME' ENTERED AT 13:49:32 ON 03 APR 2003)

FILE 'CASREACT' ENTERED AT 13:49:40 ON 03 APR 2003

L1 STR

L2 0 S L1

L3 22 S L1 FUL

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE' ENTERED AT 13:51:44 ON 03 APR 2003

FILE 'CASREACT' ENTERED AT 13:52:47 ON 03 APR 2003

Searched by: Mary Hale 308-4258 CM-1 1E01

```
     FILE 'CAPLUS' ENTERED AT 13:53:41 ON 03 APR 2003
L4            22 FILE MEDLINE
L5             1 S L4 AND (CUNNINGHAM? OR ALTERNAR? OR ABSID? OR ASPERGILL? OR G
L6             0 S L4 AND MYCOTOX?
L7             5 S L4 AND (ORGANIC SOLVENT OR EXTRACT? OR CHROMATOGRAP? OR PURIF
                 SELECT L7 1-5 RN

     FILE 'REGISTRY' ENTERED AT 13:55:04 ON 03 APR 2003
L8            38 S E1-38
L9               STR L1
L10              STR L1
L11           50 S L9
L12           50 S L10
L13        26829 S L9 FUL
L14         1497 S L10 FUL

     FILE 'CAPLUS' ENTERED AT 13:56:36 ON 03 APR 2003
L15          234 S L14 AND L13
L16            6 S L15 AND (CUNNINGHAM? OR ALTERNAR? OR ABSID? OR ASPERGILL? OR
L17            2 S L15 AND PSEUDOMON?
L18            7 S L16 OR L17

=> s l18 and (organic solvent or extract? or chromatograp? or purif? or mycotox?)
        290272 ORGANIC
          3347 ORGANICS
        292458 ORGANIC
                 (ORGANIC OR ORGANICS)
        798130 ORG
         12291 ORGS
        802427 ORG
                 (ORG OR ORGS)
        893295 ORGANIC
                 (ORGANIC OR ORG)
        570522 SOLVENT
        282505 SOLVENTS
        720583 SOLVENT
                 (SOLVENT OR SOLVENTS)
        121699 ORGANIC SOLVENT
                 (ORGANIC(W)SOLVENT)
        236068 EXTRACT?
        264617 EXT
        198041 EXTS
        415531 EXT
                 (EXT OR EXTS)
        319696 EXTD
             6 EXTDS
        319698 EXTD
                 (EXTD OR EXTDS)
         43875 EXTG
             1 EXTGS
         43876 EXTG
                 (EXTG OR EXTGS)
        338077 EXTN
         11648 EXTNS
        343051 EXTN
                 (EXTN OR EXTNS)
        955174 EXTRACT?
                 (EXTRACT? OR EXT OR EXTD OR EXTG OR EXTN)
        369581 CHROMATOGRAP?
        543532 CHROMATOG


Searched by: Mary Hale 308-4258 CM-1 1E01
```

```
FILE 'WPIDS' ENTERED AT 13:59:13 ON 03 APR 2003
COPYRIGHT (C) 2003 THOMSON DERWENT

FILE 'EMBASE' ENTERED AT 13:59:13 ON 03 APR 2003
COPYRIGHT (C) 2003 Elsevier Science B.V.  All rights reserved.


'IN' IS NOT A VALID FIELD CODE
L20         208 FILE MEDLINE
L21         223 FILE CAPLUS
L22         236 FILE BIOSIS
L23          14 FILE WPIDS
'IN' IS NOT A VALID FIELD CODE
L24         149 FILE EMBASE

TOTAL FOR ALL FILES
L25         830 CAWLEY, J?/AU,IN


'IN' IS NOT A VALID FIELD CODE
L26        1889 FILE MEDLINE
L27        1774 FILE CAPLUS
L28        2321 FILE BIOSIS
L29         433 FILE WPIDS
'IN' IS NOT A VALID FIELD CODE
L30        1763 FILE EMBASE

TOTAL FOR ALL FILES
L31        8180 WONG, J?/AU,IN

=> s l25 and l31
L32           0 FILE MEDLINE
L33           3 FILE CAPLUS
L34           1 FILE BIOSIS
L35           2 FILE WPIDS
L36           0 FILE EMBASE

TOTAL FOR ALL FILES
L37           6 L25 AND L31

=> dup rem l37
PROCESSING COMPLETED FOR L37
L38           4 DUP REM L37 (2 DUPLICATES REMOVED)

=> d cbib abs 1-4

L38  ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2003 ACS         DUPLICATE 1
2002:294175  Document No. 136:308633  Microbial conversion of bicyclic
     heteroaromatic compounds.  Cawley, James J.; Wong, John W.
     (USA).  U.S. Pat. Appl. Publ. US 20020045225 A1 20020418, 14 pp.
     (English).  CODEN: USXXCO.  APPLICATION: US 2001-924292 20010808.
     PRIORITY: US 2000-PV224089 20000809.
AB   The present invention relates to processes for the microbial oxidn. of
     bicyclic heteroarom. compds. which comprise contacting these compds. with
     a microorganism, or a suitable mutant thereof, and incubating the
     resulting mixt. under conditions sufficient to yield an amt. of their
     resp. carboxylic acids.  The present processes optionally further comprise
     the isolation and purifn. of the product carboxylic acids.  Thus,
     Pseudomonas putida ATCC 33015 converted 3-methylquinoline to
     3-quinolinecarboxylic acid with a yield of 9%.


Searched by: Mary Hale 308-4258 CM-1 1E01
```

```
         3004 CHROMATOGS
       545708 CHROMATOG
                (CHROMATOG OR CHROMATOGS)
       683592 CHROMATOGRAP?
                (CHROMATOGRAP? OR CHROMATOG)
       689780 PURIF?
         8206 MYCOTOX?
L19         2 L18 AND (ORGANIC SOLVENT OR EXTRACT? OR CHROMATOGRAP? OR PURIF?
               OR MYCOTOX?)

=> d 1-2 cbib abs

L19  ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2003 ACS
2002:294175  Document No. 136:308633  Microbial conversion of bicyclic
     heteroaromatic compounds.  Cawley, James J.; Wong, John W. (USA).  U.S.
     Pat. Appl. Publ. US 20020045225 A1 20020418, 14 pp.  (English).  CODEN:
     USXXCO.  APPLICATION: US 2001-924292 20010808.  PRIORITY: US 2000-PV224089
     20000809.
AB   The present invention relates to processes for the microbial oxidn. of
     bicyclic heteroarom. compds. which comprise contacting these compds. with
     a microorganism, or a suitable mutant thereof, and incubating the
     resulting mixt. under conditions sufficient to yield an amt. of their
     resp. carboxylic acids.  The present processes optionally further comprise
     the isolation and purifn. of the product carboxylic acids.
     Thus, Pseudomonas putida ATCC 33015 converted 3-methylquinoline
     to 3-quinolinecarboxylic acid with a yield of 9%.

L19  ANSWER 2 OF 2  CAPLUS  COPYRIGHT 2003 ACS
1961:98894  Document No. 55:98894  Original Reference No. 55:18552e-g
     Supplementary data for the paper-chromatographic separation and
     identification of phenol derivatives and related compounds of biochemical
     interest, with a "reference system".  Reio, L. (Univ. Stockholm).  J.
     Chromatog., 4, 458-76 (Unavailable) 1960.
AB   cf. CA 53, 3349g.  Rf values in 6 different solvent systems and
     corresponding color reactions produced by 10 standard reagents are
     tabulated for about 270 mono-, di-, and trihydric phenol derivs., hippuric
     acid derivs., alkaloids, hydroxylated quinolines, pyridines, and
     antibiotics of biochem. interest.  The data are useful for both sepn. and
     analysis of these materials.


=> fil medl,caplus,biosis,wpids,embase;s cawley, j?/au,in;s wong, j?/au,in
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                              60.64     693.42

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)    SINCE FILE      TOTAL
                                                 ENTRY    SESSION
CA SUBSCRIBER PRICE                              -5.86     -24.03

FILE 'MEDLINE' ENTERED AT 13:59:13 ON 03 APR 2003

FILE 'CAPLUS' ENTERED AT 13:59:13 ON 03 APR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'BIOSIS' ENTERED AT 13:59:13 ON 03 APR 2003
COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC.(R)


Searched by: Mary Hale 308-4258 CM-1 1E01
```

The typical time course of TMC-120s production in a 30-liter jar is shown in Fig. 2. The pH and packed volume (PCV) gradually increased from the initiation of the fermentation to 120 hours. The glucose concentration was gradually decreased, and reached 0.4 mg/ml at 120 hours. Compound **2** was produced in the earth stage of the fermentation, followed by the production of **1** and **3**. The maximum production of **2**, **1**, and **3** was observed at 48, 72, and 120 hours, respectively, suggesting that **1** and **3** were derived from **2** by biological or chemical transformation. The total production of **1**, **2** and **3** reached the maximum at 72 hours.

The isolation procedure for TMC-120s is summarized in Fig. 3. The fermentation broth of *Aspergillus ustus* was extracted with 1-butanol, and the extract was purified by solvent partition and repeated column chromatography. Finally, compounds **2** and **3** were recrystallized with organic solvents to afford needles. The structure determination has been reported in a separate paper.[6]

In order to obtain a preliminary information on structure-activity relationships, **2** was reduced with sodium borohydride, giving two diastereomers, **4** (*E* isomer) and **5** (*Z* isomer). Structures of **4** and **5** were determined by comparison of ^1H and ^{13}C NMR data with those of **1**, together with the NOESY experiments of **4** and **5** as shown in Fig. 4.

Fig. 2. Time course of TMC-120s production.

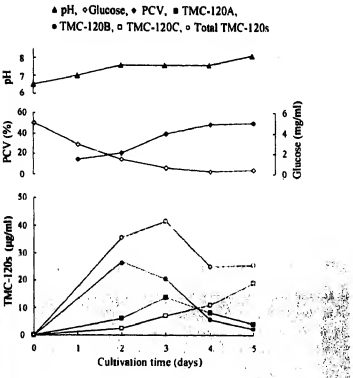


Fig. 3. Isolation and purification procedure for TMC-120A (**1**), B (**2**) and C (**3**).

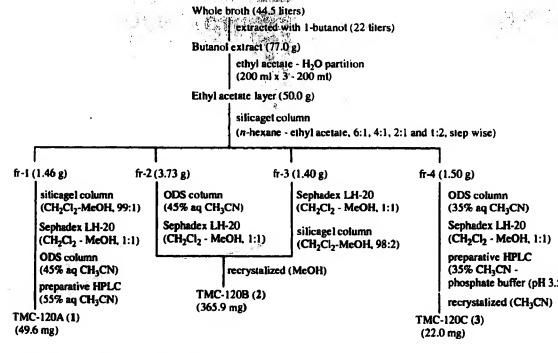
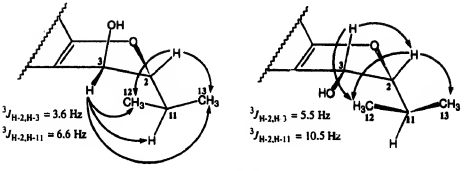


Fig. 4. The NOESY experiments of **4** and **5**.



4 (*E* isomer) **5** (*Z* isomer)

Table 1. Inhibitory effects of 1~5 on the survival of guinea pig peritoneal eosinophils.

IC_{50} (μM)				
1	**2**	**3**	**4**	**5**
13.7	2.0	> 39	> 41	> 41

TMC-120B (**2**) showed moderate inhibitory activity against the IL-5 mediated prolongation of eosinophil survival (IC_{50}=2.0 μM), but **1**, **3**, **4** and **5** which are reductive analogs of **2**, were less active than **2** or inactive (Table 1). These results suggested that the α,β-unsaturated ketone of **2** played an important role for the activity, involving the alkylation of biological nucleophiles in a MICHAEL-type addition. TMC-120B showed no cytotoxicity against human leukemia HL-60 at the concentration of 42 μM.

Experimental

Microorganism

The producing fungal strain TC 1118 was isolated from rhizosphere of grass collected in Kawaguchi-shi, Saitama, Japan. It was identified as *Aspergillus ustus* (Bain.) Thom & Church on the basis of the following distinct characteristics; dull gray conidial area, yellow reverse side of colonies, small vesicles of 6~18 μm in diameter, long brownish stipes, and globose to subglobose, rough-walled conidia of 4.0~5.5×2.5~3.0 μm from biseriate aspergilla.

Fermentation

Seed and production medium contained glucose 0.5%, glycerol 2.0%, soybean meal 2.0%, yeast extract 0.2%, $CaCO_3$ 0.4% and NaCl 0.25% (pH 6.5). Growth of the organism was evaluated as packed cell volume (PCV) by centrifuging the fermentation broth. The PCV was recorded as % of total broth volume. The production of TMC-120s during the fermentation, was analyzed by HPLC of the 1-butanol extract of the fermentation broth.

HPLC Analysis

Analytical HPLC was carried out on a Hewlett-Packard HP-1090 equipped with a diode array detector. The conditions for HPLC analysis were as follows; column: YMC-Pack ODS-AM AM-301-3 (4.6×100 mm), mobile phase: 55% aq CH_3CN, flow rate: 1.2 ml/minute, detection: UV at 254 nm. Under these conditions, TMC-120A, B and C eluted at 3.9, 4.2 and 2.1 minutes, respectively.

Reduction of 2 with Sodium Borohydride

To a solution of **2** (39.1 mg, 0.164 mmol) in ethanol (20 ml), sodium borohydride (7.8 mg, 0.206 mmol) was added. After stirring at room temperature for 5 hours, the reaction mixture was neutralized by addition of 1N HCl. The resulting mixture was concentrated and purified by

preparative HPLC (50% aqueous CH_3CN) to separate **4** and **5**, which were further purified by a Sephadex LH-20 column (22×440 mm) with CH_2Cl_2/MeOH (1 : 1) to yield **4** (7.6 mg, 19.1%) and **5** (16.1 mg, 40.4%), respectively.

4: Pale yellow solid; UV λ_{max} (log ε): 344 (3.72), 305 (3.50), 293 (sh, 3.46), 241 (4.22), 225 (4.38), 210 (4.49) nm; IR ν_{max}: 3350~3200, 2955, 2920, 2870, 1640, 1570, 1460, 1425, 1385, 1375, 1355, 1270, 1160, 1080, 985 cm^{-1}; ESI-MS (positive) *m/z*: 244 $(M+H)^+$, 226 $(M+H-H_2O)^+$, 210, 188, 173; ESI-MS (negative) *m/z*: 242 $(M-H)^-$; HRESI-MS *m/z* found 242.1147 $(M-H)^-$, calcd. for $C_{14}H_{16}NO_2^-$: 242.1181; ^1H NMR in $CDCl_3$: δ (ppm): 9.28 (s, H-9); 7.60 (d, 8.5 Hz, H-4); 7.39 (s, H-6); 7.21 (d, 8.5 Hz, H-5); 5.26 (d, 3.6 Hz, H-3); 4.52 (dd, 6.6 Hz, 3.6 Hz, H-2); 2.65 (s, H-10); 2.03 (m, H-11); 1.07 and 1.06 (d, 6.7 Hz, H-13 and 12); ^{13}C NMR in $CDCl_3$: δ (ppm): 157.0 (s, C-9b); 152.5 (s, C-7); 146.8 (d, C-9); 138.5 (s, C-5a); 127.4 (d, C-4); 122.4 (s, C-3a); 118.6 (d, C-6); 118.3 (d, C-5); 114.5 (s, C-9a); 97.9 (d, C-2); 75.5 (d, C-3); 31.5 (d, C-11); 24.2 (q, C-10); 17.7 and 17.6 (q, C-13 and 12).

5: Pale yellow solid; UV λ_{max} (log ε): 343 (3.79), 305 (3.53), 293 (sh, 3.48), 241 (4.29), 225 (4.47), 210 (4.57) nm; IR ν_{max}: 3200, 2950, 2870, 1640, 1570, 1425, 1385, 1350, 1280, 1265, 1255, 1170, 1160, 1125, 1085, 1065, 1000, 940 cm^{-1}; ESI-MS (positive) *m/z*: 244 $(M+H)^+$, 226 $(M+H-H_2O)^+$, 210, 188, 173; ESI-MS (negative) *m/z*: 242 $(M-H)^-$; HRESI-MS *m/z* found 242.1155 $(M-H)^-$, calcd. for $C_{14}H_{16}NO_2^-$: 242.1181; ^1H NMR in $CDCl_3$: δ (ppm): 9.19 (s, H-9); 7.66 (d, 8.3 Hz, H-4); 7.20 (s, H-6); 7.07 (d, 8.3 Hz, H-5); 5.22 (d, 5.5 Hz, H-3); 4.20 (dd, 10.5 Hz, 5.5 Hz, H-2); 2.54 (s, H-10); 2.54 (m, H-11); 1.40 and 1.24 (d, 6.6 Hz, H-13 and 12); ^{13}C NMR in $CDCl_3$: δ (ppm): 157.0 (s, C-9b); 151.0 (s, C-7); 145.9 (d, C-9); 138.2 (s, C-5a); 128.5 (d, C-4); 124.3 (s, C-3a); 118.8 (d, C-6); 118.0 (d, C-5); 114.1 (s, C-9a); 95.0 (d, C-2); 72.1 (d, C-3); 27.6 (d, C-11); 23.3 (q, C-10); 19.9 and 19.5 (q, C-13 and 12).

Measurement of Eosinophil Survival

Eosinophils were obtained from peritoneal lavage fluid of guinea pigs sensitized with polymixin B. The cells were purified by centrifuge on a discontinuous Percoll density gradient. The purified eosinophils (>90% purity, 7.5×10^5/well) were suspended in 100 μl of RPMI-1640 medium containing 5% (v/v) fetal calf serum, recombinant IL-5 (0.1 ng/ml) and various concentrations of drugs, and incubated at 37°C for 5 days in a humidified atmosphere containing 5% CO_2. The drugs were dissolved in DMSO and added to the medium. The final concentration of DMSO was adjusted to 0.1% (v/v). The control medium contained the same amount of DMSO. After incubation, the cells were washed with PBS and the viability of the cells were determined by their ability to take up fluorescein diacetate.

References

1) Gleich, G. J.: The eosinophil and bronchial asthma: Current understanding. J. Allergy Clin. Immunol. 85: 422~436, 1990
2) Weller, P. F.: The immunobiology of eosinophils. N. Engl. J. Med. 324: 1110~1118, 1991
3) Hue, E. J. Fraser, K. E. Austen & W. F. Owen, Jr.: Eosinophil hematopoietins antagonize the programmed cell death of eosinophils. Cytokine and glucocorticoid effects on eosinophils maintained by endothelial cell-conditioned medium. J. Clin. Invest. 88: 1982~1987, 1991
4) Rothenberg, M. E.; W. F. Owen, Jr., D. S. Silberstein, J. Woods, R. J. Soberman, K. F. Austen & R. L. Stevens: Human eosinophils have prolonged survival, enhanced functional properties, and become hypodense when exposed to human interleukin 3. J. Clin. Invest. 81: 1986~1992, 1988
5) Yamaguchi, Y.; T. Suda, S. Ohta, K. Tominaga, Y. Miura & T. Kasahara: Analysis of the survival of mature human eosinophils: interleukin-5 prevents apoptosis in mature human eosinophils. Blood 78: 2542~2547, 1991
6) Kojno, J.; H. Hiramatsu, M. Nishio, M. Sakurai, T. Okuda & S. Komatsubara: Structures of TMC-120A, B and C, novel isoquinoline alkaloids from *Aspergillus ustus* TC 1118. Tetrahedron 55: 11247~11252, 1999

WEST Search History

DATE: Thursday, April 03, 2003

Set Name side by side	Query	Hit Count	Set Name result set
	DB=JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ		
L47	L40 and L42	0	L47
L46	L40 and L43	1	L46
L45	L29 and L43	1	L45
L44	L29 and L42	0	L44
L43	L28 and L31	11	L43
L42	L28 and L30	2	L42
L41	L29 and L30	0	L41
L40	L29 and L31	1	L40
L39	L29 and L32	0	L39
L38	L29 and L33	0	L38
L37	L29 and L34	0	L37
L36	L29 and L35	0	L36
L35	L30 and L32	4513	L35
L34	L30 and L31	4906	L34
L33	L31 and L32	22594	L33
L32	Microbial or fungal or bacterial or biological	138265	L32
L31	(Production or synthesis or tansformatiuon or bioconversion)	1297801	L31
L30	absidia or Alternaria or Aspergillus or Cunninghamela or Giumerella or Penicillium or Pseudomonas	18392	L30
L29	(methylquinoxaline same carboxylic acid) or (2-methylquinoxaline same carboxylic acid)	5	L29
L28	methylquinoxaline or 2-methylquinoxaline	57	L28
L27	(((methylquinoxaline/)!.IPC. |(2-methylquinoxaline/)!.IPC. |(or/)!.IPC.))	0	L27
L26	((methylquinoxaline/)!.IPC. |(2-methylquinoxaline/)!.IPC. |(or/)!.IPC.)	0	L26
	DB=USPT,PGPB; PLUR=YES; OP=ADJ		
L25	L16 and L22	0	L25
L24	L16 and L17	0	L24
L23	L17 and L22	0	L23
L22	L18 and L21	4	L22
L21	L19 and L20	29	L21
L20	(((435/254.5)!.CCLS.))	55	L20
L19	(((435/254.3)!.CCLS.))	215	L19

L18	(((435/254.1)!.CCLS.))	634	L18
L17	(((435/243)!.CCLS.))	1073	L17
L16	((435/117)!.CCLS.)	138	L16
L15	L9 and L13	2	L15
L14	L5 and L7	2	L14
L13	L2 and L7	20	L13
L12	L7 and L11	2	L12
L11	L9 and L10	17	L11
L10	L6 and L8	17	L10
L9	L5 and L8	17	L9
L8	(Production or synthesis or tansformatiuon or bioconversion)	850341	L8
L7	absidia or Alternaria or Aspergillus or Cunninghamela or Giumerella or Penicillium or Pseudomonas	33568	L7
L6	L2 and L5	18	L6
L5	(methylquinoxaline same carboxylic acid) or (2-methylquinoxaline same carboxylic acid)	18	L5
L4	methylquinoxaline carboxylic acid or 2-methylquinoxaline carboxylic acid	0	L4
L3	methylquinoxaline n5 carboxylic acid or 2-methylquinoxaline carboxylic acid	0	L3
L2	methylquinoxaline or 2-methylquinoxaline	295	L2
L1	methylquinoxaline	295	L1

END OF SEARCH HISTORY

WEST

Generate Collection | Print

Search Results - Record(s) 1 through 2 of 2 returned.

☑ 1. Document ID: JP 2000270889 A

L42: Entry 1 of 2 File: JPAB Oct 3, 2000

PUB-NO: JP02000270889A
DOCUMENT-IDENTIFIER: JP 2000270889 A
TITLE: OXIDATION OF 2-METHYLQUINOXALINE USING MICROORGANISM

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

☑ 2. Document ID: JP 3310254 B2 EP 1028164 A1 AU 200016396 A CA 2298427 A1 JP 2000270889 A HU 200000625 A2 CN 1273276 A CZ 200000512 A3 KR 2000076650 A BR 200000375 A ZA 200000669 A MX 2000001608 A1 US 6361979 B1

L42: Entry 2 of 2 File: DWPI Aug 5, 2002

DERWENT-ACC-NO: 2000-500334
DERWENT-WEEK: 200258
COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Novel method for microbial oxidation of 2-methylquinoxaline to 2-quinoxalinecarboxylic acid comprises contacting the microorganisms with an inducer prior to oxidative incubation

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

Generate Collection | Print

Term	Documents
(28 AND 30).JPAB,EPAB,DWPI.	2
(L28 AND L30).JPAB,EPAB,DWPI.	2

Display Format: - Change Format

Previous Page Next Page

```
                AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
 NEWS HOURS     STN Operating Hours Plus Help Desk Availability
 NEWS INTER     General Internet Information
 NEWS LOGIN     Welcome Banner and News Items
 NEWS PHONE     Direct Dial and Telecommunication Network Access to STN
 NEWS WWW       CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *



FILE 'HOME' ENTERED AT 16:54:16 ON 03 APR 2003

=> file reg
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

FILE 'REGISTRY' ENTERED AT 16:54:24 ON 03 APR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:    2 APR 2003  HIGHEST RN 501410-52-2
DICTIONARY FILE UPDATES:   2 APR 2003  HIGHEST RN 501410-52-2

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> e 2-methylquinoxaline/cn
E1            1     2-METHYLQUINOLIZINIUM PICRATE/CN
E2            1     2-METHYLQUINONE/CN
E3            1 --> 2-METHYLQUINOXALINE/CN
E4            1     2-METHYLQUINOXALINE 1,4-DIOXIDE/CN
E5            1     2-METHYLQUINOXALINE 1-OXIDE/CN
E6            1     2-METHYLQUINOXALINE 4-OXIDE/CN
E7            1     2-METHYLQUINOXALINE DI-N-OXIDE/CN
E8            1     2-METHYLQUINOXALINE ION(1-)/CN
E9            1     2-METHYLQUINOXALINE N,N'-DIOXIDE/CN
E10           1     2-METHYLQUINUCLIDINE/CN
E11           1     2-METHYLRESORCIN/CN
E12           1     2-METHYLRESORCINOL/CN

=> s e3
L1            1 2-METHYLQUINOXALINE/CN

=> d

L1   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2003 ACS
RN   7251-61-8  REGISTRY
CN   Quinoxaline, 2-methyl- (6CI, 7CI, 8CI, 9CI)  (CA INDEX NAME)
OTHER NAMES:
CN     ***2-Methylquinoxaline***
FS   3D CONCORD
DR   139257-48-0
```

```
MF   C9 H8 N2
CI   COM
LC   STN Files:   BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT,
       CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, EMBASE, GMELIN*, HODOC*,
       IFICDB, IFIPAT, IFIUDB, MEDLINE, NAPRALERT, RTECS*, SPECINFO, TOXCENTER,
       USPAT2, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:   EINECS**
         (**Enter CHEMLIST File for up-to-date regulatory information)


/ Structure 1 in file .gra /


**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

            223 REFERENCES IN FILE CA (1962 TO DATE)
              1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            223 REFERENCES IN FILE CAPLUS (1962 TO DATE)
             15 REFERENCES IN FILE CAOLD (PRIOR TO 1967)


=> e 2-methylquinoline/cn
E1          1     2-METHYLQUINIZARIN/CN
E2          1     2-METHYLQUINOL NONAPRENYLTRANSFERASE/CN
E3          1 --> 2-METHYLQUINOLINE/CN
E4          1     2-METHYLQUINOLINE 1-OXIDE/CN
E5          1     2-METHYLQUINOLINE CARBANION/CN
E6          1     2-METHYLQUINOLINE COMPOUND WITH IODINE (1:1)/CN
E7          1     2-METHYLQUINOLINE CONJUGATE ACID/CN
E8          1     2-METHYLQUINOLINE ETHIODIDE/CN
E9          1     2-METHYLQUINOLINE ION(1-)/CN
E10         1     2-METHYLQUINOLINE METHIODIDE/CN
E11         1     2-METHYLQUINOLINE N-OXIDE/CN
E12         1     2-METHYLQUINOLINE N-OXIDE CARBANION/CN

=> s e3
L2          1 2-METHYLQUINOLINE/CN

=> d

L2   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2003 ACS
RN   91-63-4  REGISTRY
CN   Quinoline, 2-methyl- (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Quinaldine (8CI)
OTHER NAMES:
CN   ***2-Methylquinoline***
CN   Khinaldin
FS   3D CONCORD
MF   C10 H9 N
CI   COM
LC   STN Files:   AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS,
       BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS,
       CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIPPR*,
       DRUGU, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*,
       MSDS-OHS, NAPRALERT, NIOSHTIC, PROMT, RTECS*, SPECINFO, SYNTHLINE,
       TOXCENTER, ULIDAT, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:   DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)


/ Structure 2 in file .gra /


**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

           1542 REFERENCES IN FILE CA (1962 TO DATE)
             33 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
           1543 REFERENCES IN FILE CAPLUS (1962 TO DATE)
             15 REFERENCES IN FILE CAOLD (PRIOR TO 1967)


=> set expand cont
SET COMMAND COMPLETED
```

```
=> sel name l2
E13 THROUGH E15 ASSIGNED

=> index bioscience
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                        13.69      13.90

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS,
       BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT,
       CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE,
       DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 16:56:30 ON 03 APR 2003

66 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

=> file reg
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.55      14.45

FILE 'REGISTRY' ENTERED AT 16:56:46 ON 03 APR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:    2 APR 2003  HIGHEST RN 501410-52-2
DICTIONARY FILE UPDATES:   2 APR 2003  HIGHEST RN 501410-52-2

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> e 2-methylquinolinic acid/cn
E16           1     2-METHYLQUINOLINE-5,8-DIONE/CN
E17           1     2-METHYLQUINOLINE-8-CARBOXYLIC ACID/CN
E18           0 --> 2-METHYLQUINOLINIC ACID/CN
E19           1     2-METHYLQUINOLINIUM/CN
E20           1     2-METHYLQUINOLINIUM FLUOROTRIOXOCHROMATE(1-)/CN
E21           1     2-METHYLQUINOLINIUM METHIODIDE/CN
E22           1     2-METHYLQUINOLIZINIUM BROMIDE/CN
E23           1     2-METHYLQUINOLIZINIUM BROMOIODATE(I)/CN
E24           1     2-METHYLQUINOLIZINIUM PERCHLORATE/CN
E25           1     2-METHYLQUINOLIZINIUM PICRATE/CN
E26           1     2-METHYLQUINONE/CN
E27           1     2-METHYLQUINOXALINE/CN

=> e 2-quinolinic acid/cn
E28           1     2-QUINOLINEVALERIC ACID, .DELTA.-OXO-, ETHYL ESTER/CN
E29           1     2-QUINOLINEVALERIC ACID, .DELTA.-OXO-, METHYL ESTER/CN
E30           0 --> 2-QUINOLINIC ACID/CN
E31           2     2-QUINOLINOL/CN
E32           1     2-QUINOLINOL, 1,2,3,4-TETRAHYDRO-, BENZOATE (ESTER)/CN
E33           1     2-QUINOLINOL, 1,2,3,4-TETRAHYDRO-2-METHYL-/CN
E34           1     2-QUINOLINOL, 1,2-DIHYDRO-1-METHYL-/CN
E35           1     2-QUINOLINOL, 1,2-DIHYDRO-1-METHYL-3-NITRO-/CN
E36           1     2-QUINOLINOL, 1,2-DIHYDRO-1-METHYL-5-(NITROSOAMINO)-, (E)-/C
                    N
E37           1     2-QUINOLINOL, 1,2-DIHYDRO-1-METHYL-5-NITRO-/CN
E38           1     2-QUINOLINOL, 1,2-DIHYDRO-1-METHYL-6-NITRO-/CN
E39           1     2-QUINOLINOL, 1,2-DIHYDRO-1-METHYL-7-NITRO-/CN

=> e 2-quinolinecarboxylic acid/cn
```

```
E40          1     2-QUINOLINECARBOXIMIDOYL CHLORIDE, N-(BENZOYLOXY)-/CN
E41          1     2-QUINOLINECARBOXYAMIDE 1-OXIDE/CN
E42          1 --> 2-QUINOLINECARBOXYLIC ACID/CN
E43          1     2-QUINOLINECARBOXYLIC ACID, ((1,3-DIPHENYL-1H-PYRAZOL-4-YL)M
                   ETHYLENE)HYDRAZIDE/CN
E44          1     2-QUINOLINECARBOXYLIC ACID, ((1-(4-NITROPHENYL)-3-PHENYL-1H-
                   PYRAZOL-4-YL)METHYLENE)HYDRAZIDE/CN
E45          1     2-QUINOLINECARBOXYLIC ACID, ((10-CHLORO-9-ANTHRACENYL)METHYL
                   ENE)HYDRAZIDE/CN
E46          1     2-QUINOLINECARBOXYLIC ACID, ((1S,3AS,4R,7R,9R,10R,11R,13R,15
                   R,15AR,18R)-4-ETHYL-3A,4,6,7,8,9,10,11,12,13,15,15A-DODECAHY
                   DRO-11-METHOXY-3A,7,9,11,13,15-HEXAMETHYL-2,6,8-TRIOXO-10-((
                   3,4,6-TRIDEOXY-3-(DI/CN
E47          1     2-QUINOLINECARBOXYLIC ACID, ((2,2-DICHLORO-1-PHENYLCYCLOPROP
                   YL)METHYLENE)HYDRAZIDE/CN
E48          1     2-QUINOLINECARBOXYLIC ACID, ((2,3,4-TRIMETHOXYPHENYL)METHYLE
                   NE)HYDRAZIDE/CN
E49          1     2-QUINOLINECARBOXYLIC ACID, ((2,3,5,6-TETRAMETHYLPHENYL)METH
                   YLENE)HYDRAZIDE/CN
E50          1     2-QUINOLINECARBOXYLIC ACID, ((2,3-DICHLOROPHENYL)METHYLENE)H
                   YDRAZIDE/CN
E51          1     2-QUINOLINECARBOXYLIC ACID, ((2,3-DIHYDRO-1,4-BENZODIOXIN-6-
                   YL)METHYLENE)HYDRAZIDE/CN

=> s e42
L3           1 "2-QUINOLINECARBOXYLIC ACID"/CN

=> d

L3   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2003 ACS
RN   93-10-7  REGISTRY
CN     ***2-Quinolinecarboxylic acid (9CI)***     (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Quinaldic acid (8CI)
OTHER NAMES:
CN   2-Carboxyquinoline
CN   2-Quinolinylcarboxylic acid
CN   Quinaldinic acid
FS   3D CONCORD
MF   C10 H7 N O2
CI   COM
LC   STN Files:   AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
       BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS,
       CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, GMELIN*,
       HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, NAPRALERT, NIOSHTIC,
       RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:   EINECS**, NDSL**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)


/ Structure 3 in file .gra /


**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

            692 REFERENCES IN FILE CA (1962 TO DATE)
             27 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            692 REFERENCES IN FILE CAPLUS (1962 TO DATE)
              7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)


=> sel name l3
E52 THROUGH E56 ASSIGNED

=> index bioscience
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     7.79      22.24

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS,
       BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT,
       CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE,
       DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 16:59:05 ON 03 APR 2003

66 FILES IN THE FILE LIST IN STNINDEX
```

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

```
=> s e13-15 and e52-56
          1   FILE ANABSTR
          1   FILE BIOSIS
    9 FILES SEARCHED...
          2   FILE BIOTECHABS
          2   FILE BIOTECHDS
   13 FILES SEARCHED...
         89   FILE CAPLUS
          1   FILE CIN
   22 FILES SEARCHED...
   24 FILES SEARCHED...
          5   FILE EMBASE
   32 FILES SEARCHED...
   37 FILES SEARCHED...
          2   FILE IFIPAT
   44 FILES SEARCHED...
          5   FILE MEDLINE
          1   FILE PASCAL
   51 FILES SEARCHED...
          1   FILE SCISEARCH
          1   FILE SYNTHLINE
          9   FILE TOXCENTER
   60 FILES SEARCHED...
         28   FILE USPATFULL
   61 FILES SEARCHED...
          1   FILE USPAT2
          5   FILE WPIDS
   65 FILES SEARCHED...
          5   FILE WPINDEX

   17 FILES HAVE ONE OR MORE ANSWERS,   66 FILES SEARCHED IN STNINDEX

L4   QUE (KHINALDIN/BI OR QUINALDINE/BI OR 2-METHYLQUINOLINE/BI) AND ("QUINALDI
       C ACID"/BI OR "QUINALDINIC ACID"/BI OR 2-CARBOXYQUINOLINE/BI OR "2-QUI
       NOLINECARBOXYLIC ACID"/BI OR "2-QUINOLINYLCARBOXYLIC ACID"/BI)

=> s l4 and (microb? or microorg? or bacter? or bioconver? or biotransform? or fung## or biologic#
    6 FILES SEARCHED...
          1   FILE BIOSIS
          2   FILE BIOTECHABS
   10 FILES SEARCHED...
          2   FILE BIOTECHDS
   13 FILES SEARCHED...
         10   FILE CAPLUS
   20 FILES SEARCHED...
   24 FILES SEARCHED...
          2   FILE EMBASE
   32 FILES SEARCHED...
   34 FILES SEARCHED...
   41 FILES SEARCHED...
          3   FILE MEDLINE
   46 FILES SEARCHED...
   51 FILES SEARCHED...
          1   FILE SCISEARCH
          1   FILE TOXCENTER
   60 FILES SEARCHED...
         10   FILE USPATFULL
   61 FILES SEARCHED...
          1   FILE WPIDS
   65 FILES SEARCHED...
          1   FILE WPINDEX

   11 FILES HAVE ONE OR MORE ANSWERS,   66 FILES SEARCHED IN STNINDEX

L5   QUE L4 AND (MICROB? OR MICROORG? OR BACTER? OR BIOCONVER? OR BIOTRANSFORM?
       OR FUNG## OR BIOLOGIC####)

=> s l4 and (cunninghamella or penicillium or absidia or aspergillus or glomerella or diplodia or
    7 FILES SEARCHED...
          1   FILE BIOTECHABS
          1   FILE BIOTECHDS
   12 FILES SEARCHED...
   17 FILES SEARCHED...
```

5068060
5139040
5162473

```
  24 FILES SEARCHED...
  32 FILES SEARCHED...
  36 FILES SEARCHED...
  41 FILES SEARCHED...
  46 FILES SEARCHED...
  51 FILES SEARCHED...
  60 FILES SEARCHED...
         1   FILE USPATFULL
  61 FILES SEARCHED...
         1   FILE WPIDS
  65 FILES SEARCHED...
         1   FILE WPINDEX

   5 FILES HAVE ONE OR MORE ANSWERS,   66 FILES SEARCHED IN STNINDEX

L6   QUE L4 AND (CUNNINGHAMELLA OR PENICILLIUM OR ABSIDIA OR ASPERGILLUS OR GLO
       MERELLA OR DIPLODIA OR ALTERNARIA)

=> s l5 or l6
   4 FILES SEARCHED...
   8 FILES SEARCHED...
         1   FILE BIOSIS
         2   FILE BIOTECHABS
  10 FILES SEARCHED...
         2   FILE BIOTECHDS
  12 FILES SEARCHED...
  13 FILES SEARCHED...
        10   FILE CAPLUS
  15 FILES SEARCHED...
  22 FILES SEARCHED...
  24 FILES SEARCHED...
  30 FILES SEARCHED...
         2   FILE EMBASE
  32 FILES SEARCHED...
  33 FILES SEARCHED...
  38 FILES SEARCHED...
  42 FILES SEARCHED...
  44 FILES SEARCHED...
         3   FILE MEDLINE
  47 FILES SEARCHED...
  51 FILES SEARCHED...
  57 FILES SEARCHED...
         1   FILE SCISEARCH
         1   FILE TOXCENTER
  60 FILES SEARCHED...
        10   FILE USPATFULL
  61 FILES SEARCHED...
  64 FILES SEARCHED...
         1   FILE WPIDS
  65 FILES SEARCHED...
         1   FILE WPINDEX

  11 FILES HAVE ONE OR MORE ANSWERS,   66 FILES SEARCHED IN STNINDEX

L7   QUE L5 OR L6

=> d rank
F1          10   CAPLUS
F2          10   USPATFULL
F3           3   MEDLINE
F4           2   BIOTECHABS
F5           2   BIOTECHDS
F6           2   EMBASE
F7           1   BIOSIS
F8           1   SCISEARCH
F9           1   TOXCENTER
F10          1   WPIDS
F11          1   WPINDEX


=> file hits
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                               29.15      51.39

FILE 'CAPLUS' ENTERED AT 17:30:45 ON 03 APR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
```

```
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 17:30:45 ON 03 APR 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'MEDLINE' ENTERED AT 17:30:45 ON 03 APR 2003

FILE 'BIOTECHABS' ACCESS NOT AUTHORIZED

FILE 'BIOTECHDS' ENTERED AT 17:30:45 ON 03 APR 2003
COPYRIGHT (C) 2003 THOMSON DERWENT AND INSTITUTE FOR SCIENTIFIC INFORMATION

FILE 'EMBASE' ENTERED AT 17:30:45 ON 03 APR 2003
COPYRIGHT (C) 2003 Elsevier Science B.V.  All rights reserved.

FILE 'BIOSIS' ENTERED AT 17:30:45 ON 03 APR 2003
COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'SCISEARCH' ENTERED AT 17:30:45 ON 03 APR 2003
COPYRIGHT (C) 2003 Institute for Scientific Information (ISI) (R)

FILE 'TOXCENTER' ENTERED AT 17:30:45 ON 03 APR 2003
COPYRIGHT (C) 2003 ACS

FILE 'WPIDS' ENTERED AT 17:30:45 ON 03 APR 2003
COPYRIGHT (C) 2003 THOMSON DERWENT

FILE 'WPINDEX' ACCESS NOT AUTHORIZED

=> s l7
   2 FILES SEARCHED...
   4 FILES SEARCHED...
   5 FILES SEARCHED...
   7 FILES SEARCHED...
   8 FILES SEARCHED...
L8          31 L7

=> dup rem l8
PROCESSING COMPLETED FOR L8
L9           27 DUP REM L8 (4 DUPLICATES REMOVED)
                ANSWERS '1-10' FROM FILE CAPLUS
                ANSWERS '11-20' FROM FILE USPATFULL
                ANSWERS '21-22' FROM FILE MEDLINE
                ANSWERS '23-24' FROM FILE BIOTECHDS
                ANSWERS '25-26' FROM FILE EMBASE
                ANSWER '27' FROM FILE TOXCENTER

=> d bib abs 1-27

L9   ANSWER 1 OF 27  CAPLUS  COPYRIGHT 2003 ACS         DUPLICATE 2
AN   1994:48638  CAPLUS
DN   120:48638
TI     ***Microbial***   metabolism of quinoline and related compounds. XX.
       ***Quinaldic***     ***acid***   4-oxidoreductase from Pseudomonas sp.
     AK-2 compared to other prokaryotic molybdenum-containing hydroxylases
AU   Sauter, Monika; Tshisuaka, Barbara; Fetzner, Susanne; Lingens, Franz
CS   Inst. Mikrobiol., Univ. Hohenheim, Stuttgart, D-70593, Germany
SO   Biological Chemistry Hoppe-Seyler (1993), 374(11), 1037-46
     CODEN: BCHSEI; ISSN: 0177-3593
DT   Journal
LA   English
AB   Quinaldate 4-oxidase (I) from Pseudomonas sp. AK-2 catalyzes the
     hydroxylation of   ***quinaldic***     ***acid***   (quinoline-2-
     carboxylic acid) to kynurenic acid (4-hydroxyquinoline-2-carboxylic acid)
     with concomitant redn. of a suitable electron acceptor.  An analogous
     hydroxylation in the para position relative to the N-heteroatom was only
     recently described for   ***quinaldine***   4-oxidase and I from Serratia
     marcescens 2CC-1.  I from P. putida AK-2 was purified 78-fold to
     electrophoretic homogeneity with a recovery of 22%.  Native I (mol. wt. =
     300 kDa) was composed of 3 subunits with mol. wts. of 90, 34, and 20 kDa,
     indicating an .alpha.2.beta.2.gamma.2 structure.  I contained FAD, Mo, Fe,
     and acid-labile S in a ratio of 2:2:8:8.  Mo was probably assocd. with
     molybdopterin cytosine dinucleotide as org. part of the pterin Mo
     cofactor.  The absorption spectrum of I exhibited typical features of a
     Mo-Fe/S-flavoprotein, namely, max. at 274, 340, and 450 nm, a shoulder at
     550 nm, a A280/A450 ratio of 4.7 and a A450/A550 ratio of 3.5.  I was
```

susceptible to inactivation by MeOH, Na metaarsenite, p-[redacted]hydroxymercuribenzoate, and KCN. Cyanide caused an alteration at 320 nm in the absorption spectrum, typical for the change in the coordination sphere of the Mo. I inactivated with cyanide was reactivated to 74% by incubation with sulfide. Thus, I possesses a monooxomonosulfide-type Mo center.

L9 ANSWER 2 OF 27 CAPLUS COPYRIGHT 2003 ACS
AN 2001:520521 CAPLUS
DN 136:14981
TI ANN modeling of the penetration across a polydimethylsiloxane membrane from theoretically derived molecular descriptors
AU Agatonovic-Kustrin, S.; Beresford, R.; Yusof, A. P. M.
CS School of Pharmaceutical Sciences, Universiti Sains Malaysia, Penang, 11800, Malay.
SO Journal of Pharmaceutical and Biomedical Analysis (2001), 26(2), 241-254
CODEN: JPBADA; ISSN: 0731-7085
PB Elsevier Science B.V.
DT Journal
LA English
AB A quant. structure-permeability relationship was developed using Artificial Neural Network (ANN) modeling to study penetration across a polydimethylsiloxane membrane. A set of 254 compds. and their exptl. derived max. steady state flux values used in this study was gathered from the literature. A total of 42 mol. descriptors were calcd. for each compd. A genetic algorithm was used to select important mol. descriptors and supervised ANN was used to correlate selected descriptors with the exptl. derived max. steady-state flux through the polydimethylsiloxane membrane (log J). Calcd. mol. descriptors were used as the ANN's inputs and log J as the output. Developed model indicates that mol. shape and size, inter-mol. interactions, hydrogen-bonding capacity of drugs, and conformational stability could be used to predict drug absorption through skin. A 12-descriptor nonlinear computational neural network model has been developed for the estn. of log J values for a data set of 254 drugs. Described model does not require exptl. parameters and could potentially provide useful prediction of membrane penetration of new drugs and reduce the need for actual compd. synthesis and flux measurements.
RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 27 CAPLUS COPYRIGHT 2003 ACS
AN 1998:223669 CAPLUS
DN 128:299454
TI An investigation of the mechanism of flux across polydimethylsiloxane membranes by use of quantitative structure-permeability relationships
AU Cronin, M. T. D.; Dearden, J. C.; Gupta, R.; Moss, G. P.
CS School of Pharmacy and Chemistry, Liverpool John Moores University, Liverpool, L3 3AF, UK
SO Journal of Pharmacy and Pharmacology (1998), 50(2), 143-152
CODEN: JPPMAB; ISSN: 0022-3573
PB Royal Pharmaceutical Society of Great Britain
DT Journal
LA English
AB Quant. structure-permeability relationships (QSPRs) based on readily calcd. parameters have been developed to study penetration across a polydimethylsiloxane membrane. Maximum steady-state flux values for 256 compds. through a polydimethylsiloxane membrane were taken from previous studies. Forty-three physicochem. parameters were calcd. for each compd. and their significance to flux detd. Removal of fourteen outliers enabled derivation of a significant three-parameter QSPR based on the no. of hydrogen-bond acceptor and donor groups and sixth-order path mol. connectivity. Models based on parameters important for penetration across human skin (log P and mol. wt.) were comparatively poor. This model suggests that the mechanism of flux across a polydimethylsiloxane membrane is based mainly on hydrogen-bonding effects; as such it occurs via a mechanism of action different from that of penetration of the skin in man.
RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 27 CAPLUS COPYRIGHT 2003 ACS
AN 1995:943483 CAPLUS
DN 123:339767
TI Preparation of naphthalene and quinoline derivatives as glycoprotein GP IIb/IIa antagonists
IN Ashimori, Atsuyuki; Yoshida, Tomohiro; Ono, Shinichiro; Eda, Masahiro; Kosaka, Keigo; Mori, Fumio; Inoe, Yoshihisa; Imada, Mitsuaki; Ikegawa, Ruriko; Et, Al.

PA Green Cross Corp, Japan
SO Jpn. Kokai Tokkyo Koho, 3[illegible]pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07179407	A2	19950718	JP 1994-278180	19941111
PRAI JP 1993-282938		19931112		

OS MARPAT 123:339767
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; A = ENHC(:NH), ENHC(:NH)NH, ENH(CH2)e; wherein E = H, amidino, guanidino, NH2-protective group; B = Q - Q3; wherein D = (Z)g(CH2)hCO2R5; Z = O, NR6; R1, R2, R3, R4 = H, alkyl, halo, acyl, alkoxy; R6 = H, alkyl, cycloalkyl, aralkyl; R6 = H, alkyl, aralkyl; G = CH, N; L, M = O, NR6; a, c, g, m = 0,1; b, d, e, h = 0,1-3, f = 1-3; n = 1,2], which inhibit blood platelet aggregation, have long-lasting serum life, little side-effects, and low toxicity, can be administered orally, and are useful for the treatment and prevention of thrombotic diseases or thrombus formation during surgery and circulation outside the body, are prepd. Thus, 6-cyano- ***2*** - ***quinolinecarboxylic*** ***acid*** was condensed with tert-Bu trans-(4-aminocyclohexyloxy)acetate by using 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride in DMF at room temp. to give a quinoline deriv. (II; G = N, R = tert-Bu, R7 = cyano). II (G = CH, R = amidino, R7 = H) in vitro showed IC50 of 0.050 .mu.M for inhibiting the human blood platlet aggregation induced by ADP.

L9 ANSWER 5 OF 27 CAPLUS COPYRIGHT 2003 ACS
AN 1994:207918 CAPLUS
DN 120:207918
TI Comparative molecular field analysis combined with physicochemical parameters for prediction of polydimethylsiloxane membrane flux in isopropanol
AU Liu, Rong; Matheson, Lloyd E.
CS Lederle lab., Am. Cyanamid Co., Pearl River, NY, 10965, USA
SO Pharmaceutical Research (1994), 11(2), 257-66
CODEN: PHREEB; ISSN: 0724-8741
DT Journal
LA English
AB Comparative mol. field anal. (CoMFA) combined with various physicochem. parameters were used to develop 3-dimensional quant. structure-transportability relationships (3-D QSTR) to predict membrane flux for 108 arom. and heteroarom. compds. through polydimethylsiloxane (PDMS) membranes in iso-Pr alc. (IPA). Sybyl, a comprehensive computational mol. modeling package, was used to analyze the data. Optimized mol. models were selected using mol. modeling techniques. Partial least-squares (PLS) regression combined with cross validation or bootstrapping was used as the statistical method to establish the predictive models. Prediction was good for the steady-state flux using both steric and electrostatic field descriptors combined with a functional group classification technique. Predictive ability was substantially increased in a model using CoMFA descriptors along with log mole fraction soly. for the penetrants in isopropanol, a hydrophobic term, fchex, which is used to est. the partition coeff. between cyclohexane and water, and the addn. of an intramol. hydrogen bonding (1HB) term. The cross validated r2 and the conventional r2 for this model were 0.951 and 0.973, resp. Excellent predictions are demonstrated for the membrane flux of the compds. both inside and outside the data domain.

L9 ANSWER 6 OF 27 CAPLUS COPYRIGHT 2003 ACS
AN 1993:480073 CAPLUS
DN 119:80073
TI The development of a predictive method for the estimation of flux through polydimethylsiloxane membranes. IV. Application to a series of substituted quinolines
AU Matheson, Lloyd E.; Hu, Mengwei
CS Coll. Pharm., Univ. Iowa, Iowa City, IA, 52242, USA
SO Pharmaceutical Research (1993), 10(6), 839-42
CODEN: PHREEB; ISSN: 0724-8741

DT Journal
LA English
AB The steady-state flux of 33 substituted quinoline derivs. was detd. in polydimethylsiloxane membranes using iso-Pr alc. as the receiver solvent. These diffusants constituted a diverse group of compds. possessing a wide range of hydrophobic, steric, and electronic characteristics. Various parameters representing these physicochem. properties such as cyclohexane-water fragmental consts., molar refractivity, Hammett's .sigma. consts., intramol. hydrogen bonding ability, m.p., and mole fraction soly. were employed to develop empirical models capable of relating the rate of diffusion to these characteristics of either the substituent on the quinoline ring or the compd. itself.

L9 ANSWER 7 OF 27 CAPLUS COPYRIGHT 2003 ACS
AN 1992:612287 CAPLUS
DN 117:212287
TI Development of a novel series of styrylquinoline compounds as high-affinity leukotriene D4 receptor antagonists: synthetic and structure-activity studies leading to the discovery of (.+-.)-3-[[[3-[2-(7-chloro-2-quinolinyl)-(E)-ethenyl]phenyl][[3-(dimethylamino)-3-oxopropyl]thio]methyl]thio]propionic acid
AU Zamboni, R.; Belley, M.; Champion, E.; Charette, L.; DeHaven, R.; Frenette, R.; Gauthier, J. Y.; Jones, T. R.; Leger, S.; et al.
CS Merck Frosst Cent. Therapeut. Res., Pointe Claire-Dorval, QC, H9R 4P8, Can.
SO Journal of Medicinal Chemistry (1992), 35(21), 3832-44
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
GI

/ Structure 4 in file .gra /

AB Based on LTD4 receptor antagonist activity of quinolinylethenylpyridine I found in broad screening, structure-activity studies were carried out which led to the identification of styrylquinoline II (R = NMe2) (III; MK-571) as a potent and orally active LTD4 receptor agonist. These studies demonstrated that a Ph ring could replace the pyridine in I without loss of activity, that 7-halogen substitution in the quinoline group was optimal for binding, that the (E)-ethenyl linkage was optimal, that binding was enhanced by incorporation of a polar acidic group or groups in the 3-position of the aryl ring, and that two acidic groups could be incorporated via a dithioacetal formed from thiopropionic acid and the corresponding styrylquinoline 3-aldehyde to yield compds. such as II (R = OH) (IC50 = 3 mmol vs [3H]LTD4 binding to the guinea pig lung membrane). It was found that one of the acidic groups could be transformed into a variety of the amides without loss of potency and that the III embodied the optimal properties of intrinsic potency (IC50 = 0.8 mmol on guinea pig lung LTD4 receptor) and oral in vivo potency in the guinea pig, hyperreactive rat, and squirrel monkey. The evolution of I to III involves the increase of >6000-fold in competition for [3H]LTD4 binding to guinea pig lung membrane and a >30-fold increase in oral activity as measured by inhibition of antigen-induced dyspnea in hyperreactive rats.

L9 ANSWER 8 OF 27 CAPLUS COPYRIGHT 2003 ACS
AN 1992:210067 CAPLUS
DN 116:210067
TI Specific inhibitors of poly(ADP-ribose) synthetase and mono(ADP-ribosyl)transferase
AU Banasik, Marek; Komura, Hajime; Shimoyama, Makoto; Ueda, Kunihiro
CS Fac. Med., Kyoto Univ., Kyoto, 606, Japan
SO Journal of Biological Chemistry (1992), 267(3), 1569-75
CODEN: JBCHA3; ISSN: 0021-9258
DT Journal
LA English
AB Two classes of enzymes, poly(ADP-ribose) synthetase and mono(ADP-ribosyl)transferases, catalyze covalent attachment of multiple or single residues, resp., of the ADP-ribose moiety of NAD to various proteins. In order to find good inhibitors of poly(ADP-ribose) synthetase free of side actions and applicable to in vivo studies, a large scale survey was made using an in vitro assay system, and many potent inhibitors were found. The four strongest were 4-amino-1,8-naphthalimide, 6(5H)- and 2-nitro-6(5H)-phenanthridinones, and 1,5-dihydroxyisoquinoline. Their 50% inhibitory concns., 0.18-0.39 .mu.M, were about two orders of magnitude

lower than that of 3-aminobenzamide that is currently most popularly used. A common structural feature among all potent inhibitors, including 1-hydroxyisoquinoline, chlorthenoxazin, 3-hydroxybenzamide, and 4-hydroxyquinazoline, in addn. to the four mentioned above, was the presence of a carbonyl group built in a polyarom. heterocyclic skeleton or a carbamoyl group attached to an arom. ring. Most of the inhibitors exhibited mixed-type inhibition with respect to NAD. Comparative studies of the effects on poly(ADP-ribose) synthetase and mono(ADP-ribosyl)transferase from hen heterophils revealed high specificity of most of the potent inhibitors for poly(ADP-ribose) synthetase. On the other hand, unsatd. long-chain fatty acids inhibited both enzymes, and satd. long-chain fatty acids and vitamin K1 acted selectively on mono(ADP-ribosyl)transferase. The finding of many inhibitors of ADP-ribosyltransferases, esp. poly(ADP-ribose) synthetase, supports the view that ADP-ribosylation of proteins may be regulated by a variety of metabolites or structural constituents in the cell.

L9 ANSWER 9 OF 27 CAPLUS COPYRIGHT 2003 ACS
AN 1990:173827 CAPLUS
DN 112:173827
TI The structural basis of the mutagenicity of chemicals in Salmonella typhimurium: The Gene-Tox data base
AU Klopman, Gilles; Frierson, Manton R.; Rosenkranz, Herbert S.
CS Dep. Chem., Case West. Reserve Univ., Cleveland, OH, 44106, USA
SO Mutation Research (1990), 228(1), 1-50
CODEN: MUREAV; ISSN: 0027-5107
DT Journal
LA English
AB The CASE (Computer Automated Structure Evaluation) structure-activity methodol. has been applied to a Gene-Tox derived Salmonella mutagenicity data base consisting of 808 chems. Based upon qual. structural features, CASE identified 29 activating and 3 inactivating structural determinants which correctly predicted the probability of carcinogenicity of 93.7% of the known mutagens and nonmutagens in the data base (sensitivity = 0.998, and specificity = 0.704). Addnl., based upon a qual. structure-activity anal., CASE's performance was even better, leading to a sensitivity of 0.981 and a specificity of 1.000. Using the structural determinants identified in this data base, CASE gave excellent predictions of the mutagenicity of chems. not included in the data base. The identified biophores and biophobes can also be used to investigate the structural basis of the mutagenicity of various chem. classes.

L9 ANSWER 10 OF 27 CAPLUS COPYRIGHT 2003 ACS
AN 1989:586893 CAPLUS
DN 111:186893
TI Amino-, acetamido-, and benzamidoquinolines as inhibitors of monoamine oxidase
AU Grinberga, B.; Basko, V.; Smite, A.; Zeila, A.; Prikulis, A.
CS Latv. Gos. Univ., Riga, USSR
SO Latvijas PSR Zinatnu Akademijas Vestis, Kimijas Serija (1989), (3), 362-8
CODEN: LZAKAM; ISSN: 0002-3248
DT Journal
LA Russian
AB A series of 17 quinoline derivs. was prepd. and tested in vitro for MAO-inhibiting activity. Tyramine was used as a substrate for swine liver mitochondrial MAO. Acetamidoquinolines, esp. those substituted at positions 2, 3, 4, and 8, were stronger inhibitors than aminoquinolines, and benzamidoquinolines were the weakest inhibitors. At concns. 10-4-10-3M the derivs. were competitive inhibitors, at higher concns. they became noncompetitive inhibitors. The type and position of the substituent had profound effects on the MAO-inhibiting activity.

L9 ANSWER 11 OF 27 USPATFULL DUPLICATE 1
AN 2002:85185 USPATFULL
TI ***Microbial*** conversion of bicyclic heteroaromatic compounds
IN Cawley, James J., Lyme, CT, UNITED STATES
Wong, John W., East Lyme, CT, UNITED STATES
PI US 2002045225 A1 20020418
AI US 2001-924292 A1 20010808 (9)
PRAI US 2000-224089P 20000809 (60)
DT Utility
FS APPLICATION
LREP Gregg C. Benson, Pfizer Inc., Patent Department, MS 4159, Eastern Point Road, Groton, CT, 06340
CLMN Number of Claims: 24
ECL Exemplary Claim: 1
DRWN No Drawings

LN.CNT 1204
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to processes for the ***microbial*** oxidation of bicyclic heteroaromatic compounds which comprise contacting these compounds with a ***microorganism*** , or a suitable mutant thereof, and incubating the resulting mixture under conditions sufficient to yield an amount of their respective carboxylic acids. The present processes optionally further comprise the isolation and purification of the product carboxylic acids.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 12 OF 27 USPATFULL
AN 2002:224622 USPATFULL
TI Lavendamycin analogs, quinoline-5,8-diones and methods of using them
IN Behforouz, Mohammad, Muncie, IN, United States
Behforouz, Nancy C., Muncie, IN, United States
PA Ball State University, Muncie, IN, United States (U.S. corporation)
PI US 6444684 B1 20020903
AI US 2000-515785 20000229 (9)
RLI Division of Ser. No. US 1997-962427, filed on 31 Oct 1997, now patented, Pat. No. US 6030983, issued on 29 Feb 2000 Continuation-in-part of Ser. No. US 1995-476213, filed on 7 Jun 1995, now patented, Pat. No. US 5712289 Continuation-in-part of Ser. No. US 1994-345509, filed on 28 Nov 1994, now patented, Pat. No. US 5646150 Continuation-in-part of Ser. No. US 1993-71648, filed on 4 Jun 1993, now patented, Pat. No. US 5525611
DT Utility
FS GRANTED
EXNAM Primary Examiner: Aulakh, Charanjit S.
LREP Brinks Hofer Gilson & Lione
CLMN Number of Claims: 6
ECL Exemplary Claim: 1
DRWN 3 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 2871
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides novel lavendamycin analogs having the following general formula: ##STR1##

and quinoline-5,8-diones having the following formula: ##STR2##

Methods of making and using and compositions containing these compounds are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 13 OF 27 USPATFULL
AN 2001:97923 USPATFULL
TI Compositions and methods for treating bone deficit conditions
IN Petrie, Charles, Woodinville, WA, United States
Orme, Mark W., Seattle, WA, United States
Baindur, Nand, Edmonds, WA, United States
Robbins, Kirk G., Renton, WA, United States
Mundy, Gregory R., San Antonio, TX, United States
PA ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)
PI US 6251901 B1 20010626
AI US 1997-806769 19970226 (8)
RLI Continuation of Ser. No. US 1996-736220, filed on 23 Oct 1996, now abandoned
DT Utility
FS GRANTED
EXNAM Primary Examiner: Criares, Theodore J.
LREP Morrison & Foerster LLP
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN 91 Drawing Figure(s); 91 Drawing Page(s)
LN.CNT 1108
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compounds containing two aromatic systems covalently linked through a linker containing one or more atoms, or "linker" defined as including a covalent bond per se so 29

as to space the aromatic systems at a distance 1.5-15.ANG., are effective in treating conditions associated with bone deficits. The compounds can be administered to vertebrate subjects alone or in combination with additional agents that promote bone growth or that inhibit bone resorption. They can be screened for activity prior to administration by assessing their ability to effect the transcription of

a reporter gene coupled to a promoter associated with a bone morphogenetic protein and for their ability to stimulate ovarial growth in model animal systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 14 OF 27 USPATFULL
AN 2000:128406 USPATFULL
TI Antimicrobial denture adhesive and cleanser compositions
IN Kolias, Fred G., Bedminster, NJ, United States
Wong, Eddie, New Providence, NJ, United States
Gasman, Robert C., Montville, NJ, United States
PA Block Drug Company, Inc., Jersey City, NJ, United States (U.S. corporation)
PI US 6124374 20000926
AI US 1998-87741 19980529 (9)
DT Utility
FS Granted
EXNAM Primary Examiner: Rose, Shep K.
LREP Dann Dorfman Herrell and Skillman
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 595
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An antimicrobial denture adhesive, denture cleansing creme or denture soaking or brushing composition comprises a combination of 8-hydroxyquinoline (or its salt) and at least one copper(II) salt. The composition fights denture stomatitis by inhibiting Candida albicans.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 15 OF 27 USPATFULL
AN 2000:24657 USPATFULL
TI Lavendamycin analogs, quinoline-5,8-diones and methods of using them
IN Behforouz, Mohammad, Muncie, IN, United States
Behforouz, Nancy C., Muncie, IN, United States
PA Ball State University, Muncie, IN, United States (U.S. corporation)
PI US 6030983 20000229
AI US 1997-962427 19971031 (8)
RLI Continuation-in-part of Ser. No. US 1995-476213, filed on 7 Jun 1995, now patented, Pat. No. US 5712289 which is a continuation-in-part of Ser. No. US 1994-345509, filed on 28 Nov 1994, now patented, Pat. No. US 5646150 which is a continuation-in-part of Ser. No. US 1993-71648, filed on 4 Jun 1993, now patented, Pat. No. US 5525611
DT Utility
FS Granted
EXNAM Primary Examiner: Rotman, Alan L.
LREP Brinks Hofer Gilson & Lione
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 3 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 3180
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides novel lavendamycin analogs having the following general formula: ##STR1## and quinoline-5,8-diones having the following formula: ##STR2## Methods of making and using and compositions containing these compounds are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 16 OF 27 USPATFULL
AN 1998:9515 USPATFULL
TI Quinoline-5,8-diones and methods of using them
IN Behforouz, Mohammad, Muncie, IN, United States
Merriman, Ronald L., Ann Arbor, MI, United States
PA Ball State University, Muncie, IN, United States (U.S. corporation)
PI US 5712289 19980127
AI US 1995-476213 19950607 (8)
RLI Continuation-in-part of Ser. No. US 1994-345509, filed on 28 Nov 1994, now patented, Pat. No. US 5646150 which is a continuation-in-part of Ser. No. US 1993-71648, filed on 4 Jun 1993, now patented, Pat. No. US 5525611
DT Utility
FS Granted
EXNAM Primary Examiner: Rotman, Alan L.
LREP Brinks Hofer Gilson & Lione

CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN 3 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 3114
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides quinoline-5,8-diones having the following formula: ##STR1## wherein X, Z and R.sup.1 through R.sup.3 are defined in the specification, and salts of these quinolinediones. The invention also provides a method of making the quinolinediones. The quinolinediones have antitumor activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 17 OF 27 USPATFULL
AN 97:59208 USPATFULL
TI Methods of using lavendamycin analogs
IN Behforouz, Mohammad, Muncie, IN, United States
Merriman, Ronald L., Indianapolis, IN, United States
PA Ball State University, Muncie, IN, United States (U.S. corporation)
PI US 5646150 19970708
AI US 1994-345509 19941128 (8)
RLI Continuation-in-part of Ser. No. US 1993-71648, filed on 4 Jun 1993, now patented, Pat. No. US 5525611
DT Utility
FS Granted
EXNAM Primary Examiner: Rotman, Alan L.
LREP Brinks Hofer Gilson & Lione
CLMN Number of Claims: 6
ECL Exemplary Claim: 1
DRWN 3 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 2817
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides lavendamycin analogs having the following formula: ##STR1## wherein X, Y and R.sup.1 through R.sup.9 are defined in the specification, and salts of these analogs. The invention also provides a method of making the lavendamycin analogs. The lavendamycin analogs have antitumor and antimicrobial activity. Also, methods of treating cancer using lavendamycin methyl ester, 7-butyramido- ***2*** - ***methylquinoline*** -5,8-dione or 7-butyramido-2-formylquinoline-5,8-dione.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 18 OF 27 USPATFULL
AN 96:50908 USPATFULL
TI Lavendamycin analogs and methods of making and using them
IN Behforouz, Mohammad, 2919 W. Beechwood Ave., Muncie, IN, United States 47304
Merriman, Ronald L., 5246 Wilton Wood Ct., Indianapolis, IN, United States 46254
PI US 5525611 19960611
AI US 1993-71648 19930604 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Rotman, Alan L.
LREP Willian Brinks HoferGilson & Lione
CLMN Number of Claims: 35
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2501
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides lavendamycin analogs having the following formula: ##STR1## wherein X, Y and R.sup.1 through R.sup.9 are defined in the specification, and salts of these analogs. The invention also provides a method of making the lavendamycin analogs. The lavendamycin analogs have antitumor and antimicrobial activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 19 OF 27 USPATFULL
AN 76:34891 USPATFULL
TI Enzymatic determination of glucose
IN Banauch, Dieter, Darmstadt, Germany, Federal Republic of
Brummer, Wolfgang, Darmstadt, Germany, Federal Republic of
Ebeling, Wolfgang, Darmstadt, Germany, Federal Republic of
Helger, Roland, Darmstadt, Germany, Federal Republic of
Hennrich, Norbert, Darmstadt, Germany, Federal Republic of

Lang, Hermann, Darmstadt, Germany, Federal Republic of
PA Merck Patent Gesellschaft mit beschrankter Haftung, Darmstadt, Germany, Federal Republic of (non-U.S. corporation)
PI US 3964974 19760622
AI US 1973-395547 19730910 (5)
PRAI DE 1972-2247608 19720928
DT Utility
FS Granted
EXNAM Primary Examiner: Naff, David M.
LREP Millen, Raptes & White
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 657
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Glucose is rapidly ad quantitatively determined with an analytical agent containing glucose dehydrogenase having an activity of at least 2 .mu./mg and NADH.sub.2 oxidase activity less than 0.1%, a pyridine coenzyme, a buffer and mutarotase to increase spontaneous mutarotation of alpha-glucose to beta-glucose. There may be optionally present inhibitors for reduced pyridine coenzyme oxidases and a thermal stabilizing amount of alkali metal chloride.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 20 OF 27 USPATFULL
AN 73:6971 USPATFULL
TI ASSAYING WITH CHANGE IN ELECTRON SPIN RESONANCE SPECTRUM BASED ON CHIRALITY
IN Ullman, Edwin F., Atherton, CA, United States
Schneider, Richard S., Sunnyvale, CA, United States
PA Syva Corp., Palo Alto, CA, United States (U.S. corporation)
PI US 3716335 19730213
AI US 1971-139905 19710503 (5)
DT Utility
FS Granted
EXNAM Primary Examiner: Scovronek, Joseph
LREP Townsend & Townsend
CLMN Number of Claims: 15
DRWN No Drawings
LN.CNT 1014
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method and compounds are provided for determining amounts of energy or chemical reagents in a fluid medium by introducing into the medium a sensor which is a stable nitroxide radical functionality bonded through a methylene group to a central atom bonded to a plurality of functionalities, at least one of which participates in a chemical change, which results in a change of asymmetry about the carbon atom bonded to the methylene group.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 21 OF 27 MEDLINE
AN 79216166 MEDLINE
DN 79216166 PubMed ID: 110773
TI Transient growth inhibition of Escherichia coli K-12 by ion chelators: "in vivo" inhibition of ribonucleic acid synthesis.
AU Collins J J; Alder C R; Fernandez-Pol J A; Court D; Johnson G S
SO JOURNAL OF BACTERIOLOGY, (1979 Jun) 138 (3) 923-32.
Journal code: 2985120R. ISSN: 0021-9193.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 197909
ED Entered STN: 19900315
Last Updated on STN: 19900315
Entered Medline: 19790927
AB The ion chelators picolinic acid, ***quinaldic*** ***acid*** , 1,10-phenanthroline, and 8-hydroxyquinoline, but not ethylenediaminetetraacetate, ethyleneglycol-bis-(beta-aminoethyl ether)-N,N-tetraacetate, or dipicolinic acid, rapidly but transiently arrest growth of Escherichia coli K-12. Cells adapt and become resistant to growth inhibition by these agents, a process which requires protein synthesis. Mn2+, at low concentrations, decreases the time required for resumption of growth. Proteins synthesized during the lag are quantitatively and qualitatively different from those synthesized during

normal growth. Inhibition of growth can explained by an effect on RNA polymerase, a known metal enzyme.

L9 ANSWER 22 OF 27 MEDLINE
AN 78007876 MEDLINE
DN 78007876 PubMed ID: 903921
TI Quinoline derivatives as antiallergy agents. 2. Fused-ring ***quinaldic*** ***acids*** .
AU Hall C M; Wright J B; Johnson H G; Taylor A J
SO JOURNAL OF MEDICINAL CHEMISTRY, (1977 Oct) 20 (10) 1337-43.
Journal code: 9716531. ISSN: 0022-2623.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 197711
ED Entered STN: 19900314
Last Updated on STN: 19900314
Entered Medline: 19771125
AB A series of compounds containing two or more 4-oxo-1,4-dihydropyridine-2-carboxylic acid units fused to a central aromatic nucleus was synthesized and tested in the rat passive cutaneous anaphylaxis (PCA) assay for potential antiallergy activity. Most of the compounds of this series showed significant activity in the PCA assay. Three of these compounds. 11d, 13f, and 21, were more than 250 times as active as the standard drug, cromolyn sodium. The synthesis and ***biological*** activity are discussed.

21 & 25
22
23
24

L9 ANSWER 23 OF 27 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI
AN 2003-02098 BIOTECHDS
TI Preparation of bicyclic heteroaromatic carboxylic acids by ***microbial*** oxidation of bicyclic heteroaromatic compounds; antiinflammatory compound production by oxidation using ***Cunninghamella*** , ***Alternaria*** , ***Penicillium*** , ***Aspergillus*** , Pseudomonas and Rhodococcus spp.
AU CAWLEY J J; WONG J W
PA CAWLEY J J; WONG J W
PI US 2002045225 18 Apr 2002
AI US 2001-924292 8 Aug 2001
PRAI US 2001-924292 8 Aug 2001; US 2000-224089 9 Aug 2000
DT Patent
LA English
OS WPI: 2002-655172 [70]
AN 2003-02098 BIOTECHDS
AB DERWENT ABSTRACT:
NOVELTY - Carboxylic acids are produced by ***microbial*** oxidation of bicyclic heteroaromatic compounds.
DETAILED DESCRIPTION - Preparation of bicyclic heteroaromatic carboxylic acids: ***2*** - ***quinolinecarboxylic*** ***acid*** (I), 3-isoquinolinecarboxylic acid (III), 2-indolecarboxylic acid (V), 5-chloro-2-indolecarboxylic acid (VII), 3-quinolinecarboxylic acid (IX) or 8-quinolinecarboxylic acid (XI) comprises incubating ***2*** - ***methylquinoline*** (II), 3-methylisoquinoline (IV), 2-methylindole (VI), 5-chloro-2-methylindole (VIII), 3-methylquinoline (X) or 8-methylquinoline (XII) respectively, with a ***microorganism*** capable of oxidation of the methyl group; and optionally isolating the product by extraction with an organic solvent, followed by chromatography.
ACTIVITY - Antiinflammatory.
MECHANISM OF ACTION - None given in the source material.
USE - The products are useful e.g. for treating inflammation and other immune disorders. 5-Chloro-2 indolecarboxylic acid is useful as an intermediate in the preparation of indole-2-carboxamides, which are inhibitors of glycogen phosphorylase.
EXAMPLE - 3-Methylisoquinoline (0.1 g) was added to a culture of Pseudomonas putida ATCC No. 33015 in incubation medium. After incubation at 29 degrees C, with shaking, for 45 hours, samples were analyzed. Yield of 3-isoquinolinecarboxylic acid was 21%. (14 pages)

L9 ANSWER 24 OF 27 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI
AN 1993-14183 BIOTECHDS
TI Aerobic ***biotransformation*** of 4-methylquinoline by a soil ***bacterium*** ;
4-methylquinoline degradation by Gram-negative soil ***bacterium*** isolated by enrichment culture (conference abstract)
AU Sutton S D; Shann J R; Vestal J R; Warshawsky D
LO University of Cincinnati, Cincinnati, Ohio 45221-0172, USA.

SO Abstr.Gen.Meet.Am.Soc.Microbiol.; (1993) 93 Meet., 353
CODEN: 0005P
DT Journal
LA English
AN 1993-14183 BIOTECHDS
AB A Gram-negative soil ***bacterium*** was isolated from an abandoned coal gasification site by enrichment culture techniques. It utilized 4-methylquinoline as a source of C and energy but required additional cofactors for growth in minimal basal salts medium. The isolate demonstrated substrate specificity for 4-methylquinoline as it was unable to utilize quinoline, ***2*** - ***methylquinoline*** , ***quinaldic*** ***acid*** , 2-hydroxyquinoline, or isoquinoline as a C-source. Growth studies in liquid medium on a range of 4-methylquinoline concentrations indicated that the organism grew readily at 0.6 mM and was inhibited at 0.9 mM. An unidentified metabolite was extracted from the media at 44 hr and exhibited UV absorbance peaks at 320 nm and 270 nm. Information about the nutrient limitations and degradative abilities of this ***microorganism*** provided an important insight on how this organism may function in a natural environment. (0 ref)

L9 ANSWER 25 OF 27 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
AN 78047974 EMBASE
DN 1978047974
TI Mutagenicities of quinoline and its derivatives.
AU Nagao M.; Yahagi T.; Seino Y.; et al.
CS Biochem. Div., Nat. Cancer Cent. Res. Inst., Tokyo, Japan
SO Mutation Research, (1977) 42/3 (335-342).
CODEN: MUREAV
DT Journal
FS 037 Drug Literature Index
022 Human Genetics
030 Pharmacology
021 Developmental Biology and Teratology
005 General Pathology and Pathological Anatomy
LA English
AB Quinoline, recently reported to be carcinogenic in rats, was mutagenic to Salmonella typhimurium tester strains TA100 and TA98 in the presence of the metabolic activation system S 9 mix. 2 Chloroquinoline, a non carcinogen, was non mutagenic with or without S 9 mix. 8 Hydroxyquinoline, which is not known to be carcinogenic, was mutagenic with S 9 mix to both ***bacterial*** strains. The mutagenicities of 17 other quinoline derivatives that are not known to be carcinogenic were tested, and 12 of these compounds were mutagenic.

L9 ANSWER 26 OF 27 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
AN 77212427 EMBASE
DN 1977212427
TI Mutagenic activity of tryptophan metabolites produced by rat intestinal microflora.
AU Bowden J.P.; Chung K.T.; Andrews A.W.
CS Frederick Cancer Res. Cent., Nat. Cancer Inst., NIH, PHS, USDHEW, Frederich, Md. 21701, United States
SO Journal of the National Cancer Institute, (1976) 57/4 (921-924).
CODEN: JNCIAM
DT Journal
FS 016 Cancer
037 Drug Literature Index
LA English
AB The catabolism of tryptophan by rat intestinal microflora was studied for the production of mutagenic metabolites that might be involved in the etiology of colon cancer. Various tryptophan metabolites were assayed for mutagenic and comutagenic activity in the Ames ***bacterial*** test system. These included metabolites that were identified by thin layer chromatography in cultures of rat fecal ***bacteria*** , other compounds structurally related to tryptophan, whole unfractionated mixed fecal ***bacteria*** culture filtrates, and concentrated solvent extracts. A total of 27 materials were tested with 5 Salmonella strains in the mutagenesis assay. Most substances were inactive, and only 1 compound, o aminoacetophenone, which was unlikely to be produced in the intestine, showed weak comutagenic activity. The results did not support the hypothesis that tryptophan metabolites produced by intestinal microflora are major etiologic factors in cancer of the colon.

L9 ANSWER 27 OF 27 TOXCENTER COPYRIGHT 2003 ACS
AN 2002:374018 TOXCENTER
DN EMICBACK-24008

WEST

End of Result Set

Generate Collection | Print

L42: Entry 2 of 2 File: DWPI Aug 5, 2002

DERWENT-ACC-NO: 2000-500334
DERWENT-WEEK: 200258

TITLE: Novel method for microbial oxidation of 2-methylquinoxaline to 2-quinoxalinecarboxylic acid comprises contacting the microorganisms with an inducer prior to oxidative incubation

INVENTOR: BURNS, M P; CAWLEY, J J ; WONG, J W

PATENT-ASSIGNEE:

ASSIGNEE	CODE
PFIZER PROD INC	PFIZ
PFIZER INC	PFIZ

PRIORITY-DATA: 1999US-119942P (February 12, 1999), 2000US-0492548 (January 27, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 3310254 B2	August 5, 2002		015	C12P017/12
EP 1028164 A1	August 16, 2000	E	020	C12P017/12
AU 200016396 A	August 17, 2000		000	C12P017/12
CA 2298427 A1	August 12, 2000	E	000	C12P017/12
JP 2000270889 A	October 3, 2000		053	C12P017/12
HU 200000625 A2	November 28, 2000		000	C12P007/40
CN 1273276 A	November 15, 2000		000	C12P017/12
CZ 200000512 A3	March 14, 2001		000	C12P017/12
KR 2000076650 A	December 26, 2000		000	C07D241/44
BR 200000375 A	August 21, 2001		000	C12P017/12
ZA 200000669 A	September 26, 2001		036	C12P000/00
MX 2000001608 A1	January 1, 2001		000	C12P017/12
US 6361979 B1	March 26, 2002		000	C12P017/16

DESIGNATED-STATES: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP 3310254B2	February 10, 2000	2000JP-0038207	
JP 3310254B2		JP2000270889	Previous Publ.
EP 1028164A1	February 7, 2000	2000EP-0300936	
AU 200016396A	February 14, 2000	2000AU-0016396	
CA 2298427A1	February 10, 2000	2000CA-2298427	
JP2000270889A	February 10, 2000	2000JP-0038207	
HU 200000625A2	February 11, 2000	2000HU-0000625	
CN 1273276A	February 12, 2000	2000CN-0106543	
CZ 200000512A3	February 11, 2000	2000CZ-0000512	
KR2000076650A	February 12, 2000	2000KR-0006609	
BR 200000375A	February 14, 2000	2000BR-0000375	
ZA 200000669A	February 11, 2000	2000ZA-0000669	
MX2000001608A1	February 15, 2000	2000MX-0001608	
US 6361979B1	February 12, 1999	1999US-119942P	Provisional
US 6361979B1	January 27, 2000	2000US-0492548	

INT-CL (IPC): C07 D 241/44; C12 N 1/14; C12 N 1/20; C12 P 0/00; C12 P 7/40; C12 P 17/12; C12 P 17/16; C12 P 17/18; C12 P 7/40; C12 P 17/12; C12 R 1:00; C12 R 1:00; C12 N 1/14; C12 N 1/14; C12 N 1/14; C12 N 1/14; C12 N 1/20; C12 N 1/20; C12 P 17/12; C12 P 17/12; C12 P 17/12; C12 P 17/12; C12 P 17/12; C12 P 17/12; C12 P 17/12; C12 R 1:01; C12 R 1:01; C12 R 1:38; C12 R 1:38; C12 R 1:645; C12 R 1:645; C12 R 1:65; C12 R 1:65; C12 R 1:66; C12 R 1:66; C12 R 1:80; C12 R 1:80; C12 P 17/12; C12 R 1:65; C12 P 17/12; C12 R 1:645; C12 P 17/12; C12 R 1:66; C12 P 17/12; C12 R 1:38; C12 P 17/12; C12 R 1:80

ABSTRACTED-PUB-NO: EP 1028164A
BASIC-ABSTRACT:

NOVELTY - A method for oxidizing 2-methylquinoxaline to 2-quinoxalinecarboxylic acid comprising contacting 2-methylquinoxaline with Absidia or Pseudomonas, is new.

DETAILED DESCRIPTION - The microbial oxidation of 2-methylquinoxaline to 2-quinoxalinecarboxylic acid further comprises contacting 2-methylquinoxaline with Absidia glauca ATCC No. 22752/74480, A. pseudocylindrospora ATCC No. 24169, A. repens ATCC No. 14849/74481, Actinomucor elegans ATCC No. 6476, Alternaria solani ATCC No.11078, Aspergillus tamarii ATCC No. 16865, Coniophora putanea ATCC No. 12675, Cunninghamella echinulata ATCC No. 8688a/8688b/8983/9244/9245/10028b/2626-9/31690/36112, C. homothallica ATCC No. 16161, Cylindrocarpon destructans ATCC No. 66963, Diplodia gossypina ATCC No. 20575, Epicoccum neglecta ATCC No. 12723, Glomerella lagenaria ATCC No. 14724, Penicillum claviforme ATCC No. 10426, Penicillum duclauxii ATCC No. 10440, Penicillum glabrum ATCC No. 11080, Pseudocochliobolus lunatus ATCC No. 24155, Pseudomonas putida ATCC No. 33015/202190 Rhodococcus rhodochrous ATCC No. 190657 or Thamnostylum piriforme ATCC No. 8686.

USE - The method is used to produce 2-quinoxalinecarboxylic acid.
ABSTRACTED-PUB-NO:

US 6361979B
EQUIVALENT-ABSTRACTS:

NOVELTY - A method for oxidizing 2-methylquinoxaline to 2-quinoxalinecarboxylic acid comprising contacting 2-methylquinoxaline with Absidia or Pseudomonas, is new.

DETAILED DESCRIPTION - The microbial oxidation of 2-methylquinoxaline to 2-quinoxalinecarboxylic acid further comprises contacting 2-methylquinoxaline with Absidia glauca ATCC No. 22752/74480, A. pseudocylindrospora ATCC No. 24169, A. repens ATCC No. 14849/74481, Actinomucor elegans ATCC No. 6476, Alternaria solani ATCC No.11078, Aspergillus tamarii ATCC No. 16865, Coniophora putanea ATCC No. 12675, Cunninghamella echinulata ATCC No. 8688a/8688b/8983/9244/9245/10028b/2626-9/31690/36112, C. homothallica ATCC No. 16161, Cylindrocarpon destructans ATCC No.

66963, Diplodia gossypina ATCC No. 20575, Epicoccum neglecta ATCC No. 12723, Glomerella lagenaria ATCC No. 14724, Penicillum claviforme ATCC No. 10426, Penicillum duclauxii ATCC No. 10440, Penicillum glabrum ATCC No. 11080, Pseudocochliobolus lunatus ATCC No. 24155, Pseudomonas putida ATCC No. 33015/202190 Rhodococcus rhodochrous ATCC No. 190657 or Thamnostylum piriforme ATCC No. 8686.

USE - The method is used to produce 2-quinoxalinecarboxylic acid.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS: NOVEL METHOD MICROBE OXIDATION ACID COMPRISE CONTACT MICROORGANISM INDUCE PRIOR OXIDATION INCUBATE

DERWENT-CLASS: B02 D16

CPI-CODES: B06-D06; B11-A01; D05-C; D05-H10;

CHEMICAL-CODES:

Chemical Indexing M2 *01*
Fragmentation Code
D012 D750 J0 J011 J1 J111 M280 M320 M412 M511
M520 M530 M540 M720 M904 M905 N131 N132 N209 N222
N341 N411 Q233
Specfic Compounds
A28R0K A28R0P

Chemical Indexing M2 *02*
Fragmentation Code
D012 D750 M210 M211 M240 M281 M320 M412 M511 M520
M530 M540 M730 M904 M905
Specfic Compounds
A28R3K A28R3S

Chemical Indexing M2 *03*
Fragmentation Code
G012 G100 M210 M211 M240 M282 M320 M414 M510 M520
M531 M540 M610 M730 M904 M905 M910
Specfic Compounds
00845K 00845S
Registry Numbers
0845S 0845U

Chemical Indexing M2 *04*
Fragmentation Code
G013 G100 M210 M211 M240 M282 M320 M414 M510 M520
M531 M540 M610 M730 M904 M905 M910
Specfic Compounds
00785K 00785S
Registry Numbers
0785S 0785U

UNLINKED-DERWENT-REGISTRY-NUMBERS: 0785S; 0785U ; 0845S ; 0845U

SECONDARY-ACC-NO:
CPI Secondary Accession Numbers: C2000-150315